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**HAVING A FIRM-ER GRIP:
THE IMPACT OF LEADER GENDER, LEADERSHIP STYLES, AND FOLLOWER
GENDER ON LEADERSHIP EFFECTIVENESS**

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Doctor of Philosophy in Management

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March, 2017

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THESIS SUMMARY

This research examined how and under what conditions gender affects leadership effectiveness. Grounding the analysis in the Social Identity Theory of Leadership (SITL), a set of hypotheses was developed which predicted that the effect of leader gender on leadership effectiveness will be mediated by leadership group prototypicality. Stemming from the Expectancy Violations Theory and the Uncertainty Reduction Hypothesis, leadership group prototypicality was hypothesized to be a function of firstly the interaction between leader gender and leadership styles (directive versus participative), and secondly between leader gender, leadership styles (directive versus participative), and follower gender. Three studies were conducted to test this. Study 1 collected data from 151 participants who sat through a video manipulation. Moderated mediation analyses revealed that female leaders were considered more prototypical and thus more effective than male leaders when they engaged in directive leadership, and that this relationship was particularly pronounced with male followers. Regardless of follower gender, male leaders were not considered more prototypical than female leaders when they engaged in participative leadership, and the moderated mediation hypotheses were not supported. Study 2 attempted to replicate this finding by utilizing a written scenario manipulation. Data was collected from 170 participants although moderated mediation analyses did not reveal a significant effect of leader gender on leadership effectiveness through leadership group prototypicality. While the findings were in line with the Role Congruity theory, they were also in line with the SITL. Finally, Study 3 replicated the findings of the first experiment in a field setting. Data was collected from 126 employees in the services sector. As in Study 1, moderated mediation analyses showed that female leaders who engaged in directive leadership were more prototypical and ultimately more effective than male leaders who engaged in equivalent behaviour. Study 3 also did not find support for the moderated mediation hypotheses under participative leadership. In sum, the studies conducted provide internal and external validity to the proposed research model.

Keywords: SITL theory, leadership group prototypicality, directive leadership, participative leadership

DEDICATION

My heartfelt gratitude goes to my sister, Michelle, who sat me on the bed on the afternoon of that April day three and a half years ago and got me to where I am today.

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CHAPTER 1: INTRODUCTION

“In the Battle of the Pelennor Fields, the Lord of the Nazgûl looms over the crushed Théoden. As the Nazgûl prepares to feast on the fallen king’s flesh, Dernhelm intervenes and challenges the Dark Lord.

*Dernhelm: If you come closer, I will kill you!
The Lord of the Nazgûl: No man can kill me... Die!*

Dernhelm struggles to his feet, removes his helmet, and reveals that he is in fact Éowyn, the Lady of Rohan, in disguise.

Éowyn: I am no man!

Éowyn thrusts her sword into the Dark Lord’s face. He topples back dead.”

The Return of the King – Lord of the Rings – J.R.R Tolkien

1.1 INTRODUCTION

Understanding the impact of gender on leadership effectiveness is particularly important in our current times as the representation of female leaders in what are stereotypically masculine roles increases, albeit at an incremental rate (Catalyst, 2016a, 2016b). When compared to males, females occupy merely 4.2% of chief executive officers of S&P companies and only 19.2% of board level members (Catalyst, 2016c). When it comes to promotions, females have lower probabilities of being chosen than their male colleagues, despite being equally qualified (see Blau & Devaro, 2007; Gjerde, 2002). The fact that female leaders are less likely to be appointed in key leadership positions while are more likely to find themselves in precarious roles that are almost ‘destined’ to fail (Ryan, Haslam, Hersby, & Bongiorno, 2011; Ryan & Haslam, 2005) begs the question of whether female leaders are considered as effective as male leaders. A plethora of research has addressed the relationship between gender and leadership effectiveness at both the individual (for meta-analyses, see Eagly, Karau, & Makhijani, 1995; Paustian-Underdahl, Walker, & Woehr, 2014) and the dyadic level (Tsui & O’Reilly, 1989); (dis)similarity between a leader and their follower. Results reveal inconsistent findings along with a lack of a coherent theoretical framework that would explain this inconsistency.

Two major streams of research have previously addressed the impact of leader gender on measures of leadership effectiveness: The first one is grounded in the relational demography literature which looked at the effectiveness of leaders at the dyadic level (Tsui & O'Reilly, 1989). In this stream, two theoretical frameworks dominated the discussions; namely the similarity-attraction paradigm (Byrne, 1971) and the more comprehensive self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Though via different mechanisms, the main contention of both approaches is that similarity between leaders and followers yields positive outcomes while dissimilarity yields negative outcomes (Tsui & O'Reilly, 1989; Vecchio & Bullis, 2001). However, empirical evidence in the relational demography approach points to mixed results at best and thus without a clear indication as to how and when male and female leaders are most effective (Adebayo & Udegbe, 2004; Duffy & Ferrier, 2003; Epitropaki & Martin, 1999; Green, Whitten, & Medlin, 2005; Loi & Ngo, 2009; Tsui & O'Reilly, 1989; Varma & Stroh, 2001; Vecchio & Bullis, 2001).

Role congruity theory (Eagly & Karau, 2002) and related stereotype fit theories (Heilman, 2001; Rudman & Glick, 2001) are the second stream of research that looked at the impact of gender and focused specifically on the role of female leaders. Predominantly, the theories postulate that female leaders are only successful to the extent to which the leadership role is congruent with their gender stereotypes. For instance, to be effective, role congruity theory posits that female leaders would need to endorse 'female-like' attributes (communal characteristics such as warmth and kindness) into their leadership roles as long as they are not viewed as inappropriate (Eagly & Karau, 2002). In a recent address of the role congruity theory, Paustian-Underdahl et al., (2014) showed how incongruity can also negatively impact the effectiveness of male leaders. While meta-analytic evidence points to no difference in the effectiveness of male and female leaders per se (Eagly, Makhijani, & Klonsky, 1992), a fine-grained analysis showed that across a range of predominantly masculine leadership roles, female leaders were rated as less effective than their male counterparts (Eagly et al., 1992; Paustian-Underdahl et al., 2014). And

while the majority of leadership roles are engraved with masculine stereotypes (Cejka & Eagly, 1999; Koenig, Eagly, Mitchell, & Ristikari, 2011), role congruity and other related theories do not offer contingency factors that can explain when female leaders are as effective as male leaders (Eagly & Karau, 2002).

Moreover, several tenets underlying role congruity theory have been refuted in a recent meta-analysis on gender and perceptions of leadership effectiveness, namely that female leaders would be better rated than male leaders in female-typed jobs, that male raters would prefer male leaders, and that female leaders would be considered less effective in business settings (Paustian-Underdahl et al., 2014). Additionally, recent studies have shown positive effects when females divert from their communal norm and engage in agentic behavior (e.g., Amanatullah & Tinsley, 2013; Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010) providing contrasting evidence to both the role congruity theory and the related fit theories.

The lack of a comprehensive theoretical framework that can explain what female leaders need to exhibit to be effective in what are typically considered masculine roles necessitates an approach that can explain how and when female leaders can be endorsed. This thesis aims to address this gap in the literature by grounding the analysis in the social identity theory of leadership (SITL) (Hogg, 2001; van Knippenberg & Hogg, 2003) which offers a plausible way forward. The SITL hinges on the extent to which leaders are considered prototypical – that is, embodying the attitudes, attributes, and behavior of the group – which in turn leads to leadership effectiveness (Hogg, van Knippenberg, & Rast, 2012; van Knippenberg & Hogg, 2003). What the SITL further implies is that originally non-prototypical leaders can engage in an array of behaviors that would eventually cast them as prototypical (e.g., van Knippenberg & van Knippenberg, 2005). While the SITL postulates that leadership group prototypicality does not have to encompass demographic characteristics (van Knippenberg, 2011), having a female leader in an organizational leadership role that is predominantly male, as well as with male-like organizational behavioral norms is often a barrier to perceiving a female leader as the

prototypical group member (see Hogg et al., 2006). One way of countering this may be for her to display overtly prototypical group behavior (see Giessner & van Knippenberg, 2008; van Knippenberg & van Knippenberg, 2005) that will allow her to shape and carve the group's identity and norms (Steffens et al., 2014). I build on this and propose that one way in which female leaders can be considered prototypical, and thus endorsed, is through using certain leadership styles. In an organizational role that is stereotypically-male (Koenig et al., 2011; Powell, Butterfield, & Parent, 2002), female leaders will need to engage in leadership behaviors that would render them prototypical - namely directive leadership as opposed to participative leadership. Although this proposition comes in stark contrast to research on the backlash effect (social and economic penalties incurred on females who behave counter-stereotypically) (Eagly & Karau, 2002; Rudman, Moss-Racusin, Phelan, & Nauts, 2012; Rudman & Phelan, 2008), I support my argumentation by building on the expectancy violations theory (Jussim, Coleman, & Lerch, 1987) and on the uncertainty reduction hypothesis (Reid & Hogg, 2005).

Expectancy violations theory (Jussim et al., 1987) stipulates that people are more extremely evaluated when they engage in behavior that violates stereotyped expectations of their groups and this has been empirically supported in a series of studies (e.g., Jussim, Fleming, Coleman, & Kohberger, 1996; Lanaj & Hollenbeck, 2015). Stemming from expectancy violations theory, I posit that female leaders who engage in behaviors that are considered prototypical though atypical for their gender stereotype, i.e., directive leadership, will be considered more prototypical than their male counterparts who engage in the same behavior. By the same token, male leaders who engage in participative leadership behavior will be considered more prototypical than female leaders who engage in the same leadership style.

This idea is further supported by the uncertainty reduction hypothesis (Reid & Hogg, 2005) and particularly by the work of Chattopadhyay, George, and Ng (2011) which applies the hypothesis to demographic differences in dyads. The uncertainty reduction perspective holds that gender dissimilarity is associated with uncertainty about how to behave to meet performance

outcomes. Although Chattopadhyay and colleagues do not explicitly hypothesize about leadership, their arguments can be taken to suggest that similar mechanisms would operate between a leader and their followers. Therefore, it is likely that a female leader is more likely to elicit feelings of uncertainty in her followers as she is violating gender stereotypes, for leadership is generally perceived as a male-prerogative (Eagly & Karau, 2002; Heilman, 2012; Koenig et al., 2011). Under heightened uncertainty, followers turn to leaders who are able to prescribe a clear and unambiguous group norm (Hogg et al., 2012; Reid & Hogg, 2005) and previous research has found support for autocratic leadership under increased uncertainty (Rast, Gaffney, Hogg, & Crisp, 2012; Rast, Hogg, & Giessner, 2013). This leads to the corollary that for female leaders to be considered prototypical, they have to alleviate any uncertainty exhibited by their followers and in that, they have to display a directive leadership style. This behavior would be particularly successful when dealing with male followers who tend to exhibit and endorse stereotypical beliefs about female leaders and are thus prone to extreme feelings of uncertainty (Eagly et al., 1995; Eagly & Karau, 2002). Once considered prototypical, female leaders will be perceived as effective leaders.

On the other hand, as male leaders are more often viewed as the ‘norm’ in organizational leadership positions (Eagly & Karau, 2002; Ridgeway, 2004), they are not likely to elicit heightened uncertainty among their followers. As male leaders do not evoke uncertainty in their followers, it is unnecessary for them to engage in directive leadership. As a matter of fact, research has shown that ‘in-group’ leaders enjoy better influence if they resort to softer leadership techniques such as participative leadership (Subašić, Reynolds, Turner, Veenstra, & Haslam, 2011). Male leaders hence have more leverage to exercise participative leadership than their female counterparts whilst still being seen as prototypical (Sauer, 2011), and consequently drive leadership effectiveness.

In order to test this theoretical framework, I adopt an objectivist ontology and a realist epistemology where unobservable constructs can be captured via validated measures and scales

(Lee & Lings, 2008). As I aim to predict and explain relationships between leader gender and leadership effectiveness, a quantitative methodology is employed. This choice of methodology is warranted as leadership research and in particular the gender and leadership literature, are considered in a mature stage where well-researched models and theories have been expansively developed and broad points of agreement set (Avolio, Sosik, Jung, & Berson, 2003; Bryman, 2004; Edmondson & Mcmanus, 2007). As research on gender and leadership has yielded inconsistent results, this stimulates the refinement of existing knowledge through focusing on testable hypotheses that advance prior work, suggesting new mediating mechanisms, and proposing different boundary conditions (Edmondson & Mcmanus, 2007). Consequently, this thesis aims to fulfill the objective of testing the associations among well-developed constructs – gender, leadership styles, and leadership effectiveness - by conducting experimental and field study research (Scandura & Williams, 2000; Shadish, Cook, & Campbell, 2002)

Subjecting the framework to an empirical test, three studies will be performed. Study one will seek to establish internal validity of the framework by measuring the responses of 151 students from a UK-based business school to a range of leadership characteristics. I will manipulate leader gender, leadership style (directive versus participative) and follower gender in a 2 x 2 x 2 between-subject design. Based on the recommendation of Aguinis and Bradley (2014) and in order to increase experimental realism, I use video vignettes as the experimental medium. To further corroborate any findings from Study one, Study two will also employ an experimental design and will use paper vignettes. Study three will subject the model to a final empirical test to establish external validity. In doing so, I collect data from 126 employees working in different services organizations.

1.2 THEORETICAL CONTRIBUTIONS

This thesis contributes to the gender and leadership effectiveness literature as well as the SITL in several ways. Firstly, I contribute to the gender literature by shifting the focus of the study of the effectiveness of female leaders from the two predominant frameworks, namely the

relational demography literature (Tsui & O'Reilly, 1989) and the role congruity theory (Eagly & Karau, 2002) and related fit theories (Heilman, 1983; Rudman & Glick, 1999). Specifically, I address the theoretical and empirical shortcomings of the relational demography literature in effectively explaining how female leaders thrive in key leadership positions. In doing so, I alter the focus from the similarity between leader and follower gender (cf. Tsui & O'Reilly, 1989; Vecchio & Brazil, 2007) and rather ground the primary attention on the role that the leader plays in shaping the experience of the followers (Hogg et al., 2012). The thesis also addresses another main shortcoming of the relational demography framework that emphasized the self-enhancement motive of the social identity theory and the self-categorization theory while disregarding the uncertainty reduction motive (Reid & Hogg, 2005; Reynolds, Turner, & Haslam, 2003). As I build my model, I rely on the uncertainty reduction motive as the main driver of followers' experience that shapes their preference for leadership behavior (Rast et al., 2013).

My second contribution to the gender literature lies in challenging core assumptions underlying the role congruity theory and the related stereotype fit theories (Eagly & Karau, 2002; Heilman, 1983; Rudman & Glick, 2001). In doing so, I test a model whereby leadership effectiveness does not hinge on the gender of leader. Moreover, I also posit that engaging in directive leadership would be adaptive for female leaders seeking to be endorsed by their followers; while the role congruity theory suggests otherwise, I refute the main theoretical proposition of the theory and propose an alternative. Most importantly, as I address the gap in the role congruity theory (Eagly & Karau, 2002), one of the main contributions in challenging the role congruity theory comes in the form of offering female leaders a solution (engaging in a certain leadership style which will be later argued to be directive leadership) that would increase their endorsement of their leadership positions.

Another main contribution of this thesis is towards the SITL and particularly to the literature on leadership group prototypicality. In doing so, I extend research on the SITL in looking at additional behavior that originally non-prototypical leaders need to engage in to be

effective. Extending the works of several researchers in this field (e.g., Giessner & van Knippenberg, 2008; Platow, van Knippenberg, Haslam, van Knippenberg, & Spears, 2006; Platow & van Knippenberg, 2001; van Knippenberg & van Knippenberg, 2005), I propose and test a model whereby a directive leadership style would present female leaders as more prototypical than their male counterparts and vice-versa for participative leadership. In doing so, I add an additional set of behaviors that originally non-prototypical leaders can engage to be endorsed.

An additional contribution to the SITL lies in building on the work of Hogg and colleagues (2006) by integrating demographic characteristics in the study of leadership group prototypicality. While leadership group prototypicality does not have to include demographic characteristics (van Knippenberg, 2011), I posit that female leaders in what are commonly considered male leadership roles would have to engage in ‘prototypical-like’ leadership behavior in order to be effective. I extend this research by underpinning it with the expectancy violations theory to support the proposed interactive effects.

Furthermore, I build on the growing literature examining the uncertainty reduction hypothesis underlying the SITL (Hogg & Mullin, 1999; Reid & Hogg, 2005). Previous research has looked at different manifestations of uncertainty including the need for cognitive closure, role ambiguity, and self-uncertainty (Cicero, Pierro, & van Knippenberg, 2009; Pierro, Cicero, Bonaiuto, van Knippenberg, & Kruglanski, 2005; Rast et al., 2013). I integrate the uncertainty reduction model of demographic dissimilarity proposed by Chattopadhyay et al. (2011) into my framework and consider the notions of *norm* and *instrumental* uncertainty in affecting followers’ perceptions of leadership group prototypicality. I postulate in my framework that female leaders would induce feelings of uncertainty, both norm and instrumental, in her followers that are best alleviated when she is able to prescribe clear structural clarity. I argue that this can be achieved through resorting to directive leadership behavior.

Furthermore, I extend the work of Rast and colleagues (2012, 2013) who found that not only non-prototypical leaders can gain support under times of heightened self-uncertainty, but also engaging in an autocratic leadership style would render leaders more effective. Extending those findings further, I propose that as female leaders elicit heightened levels of uncertainty in their followers, engaging in a directive leadership style does not only constitute the ‘prototypical’ leadership style, but serves to reduce the uncertainty exhibited by her followers.

Finally, I operationalize the SITL through perceptions of leadership group prototypicality and propose it as the core explanatory variable in the model. In doing so, I extend research on the SITL and add to the literature examining leadership group prototypicality as a mediator versus a moderator. Few studies to date have looked at leadership group prototypicality as the underlying mechanism leading to leadership effectiveness (Rast et al., 2013; Yoshida, Sendjaya, Hirst, & Cooper, 2013) whereas there is an abundance of studies examining the construct as a boundary condition (e.g., Cicero et al., 2009; Giessner & van Knippenberg, 2008). I add to this growing stream of research by showing that being perceived as a prototypical leader underlies the path to leadership effectiveness.

1.3 PRACTICAL CONTRIBUTIONS

Beyond the theoretical contributions outlined above, this research offers several insights to practitioners seeking to support the path and enhance the effectiveness of female leaders. For starters, this thesis provides female leaders with a framework of behavior to engage in, at least in the current times where leadership positions are still predominantly considered a male prerogative. While it is not ideal to deviate from their authentic leadership behavior, it is proposed that female leaders are better to engage in a directive leadership style to be endorsed. Until a time is reached where gender stereotypes change and leadership becomes more inclusive, this thesis provides one of many steps required to advance the leadership positions of female leaders.

Moreover, I aim to demonstrate to practitioners that previously considered detrimental leadership behavior (such as directive leadership) could well be adaptive for female leaders, at least when compared with their male counterparts. This contribution bears implications for practitioners in charge of evaluating the performance of female leaders as well as for broader organizational practices. Through the model, I aim to provide managers assessing the effectiveness of female leaders with a new lens to understand the dynamics of the leadership process. In that, assessors and raters would be better able to understand and favorably rate the performance of a female leader if she engages in directive leadership. They would also be better able to prevent negative stereotypes arising against female leaders who engage in such leadership behavior. Furthermore, I aim to provide evidence from which training can be provided for raters to ensure they do not engage in bias against female leaders. This is particularly important in consideration of the backlash effect surrounding females who engage in ‘atypical’ leadership behavior (Rudman & Glick, 1999).

In addition, I hope to provide broader organizational practices with a new approach that would enthruse them to counteract bias that plays against the effectiveness of female leaders; especially those related to training and development, recruitment, and selection. As I aim to demonstrate how directive leadership is more suitable for female leaders to be effective, the thesis could also inform training programs for managers who run the above stated functions. In this light, organizations would be prompted to support current and prospective female leaders who engage in more directive leadership behavior and to have practices in place to shield them against possible backlash from their peers/assessors.

Thirdly, the results of the studies shed important light for organizations seeking to build leader-member teams. In this thesis, I wish to portray how matching leader-follower gender is not the crucial determinant for leadership effectiveness. As this gender matching becomes secondary, leadership behavior is what comes to the forefront as beneficial or detrimental for the effectiveness of followers. Through the model, organizations can make sure that their leaders, and

especially female leaders, are trained on using the right leadership style, i.e., directive leadership, particularly when leading male followers.

The above stated contributions could also offer a potential solution to the problem female managers face on a strategic level – one that is related to career advancement and promotions (Blau & Devaro, 2007; Gjerde, 2002; Heilman, 2001). If females engage in a prototypical leadership behavior, they might as well be able to overcome several barriers that hinders their progression in an organization (see Eagly & Carli, 2015), particularly if they are better rated by their managers. This is believed to have a ripple effect as once female leaders are better supported and thus successful in their leadership positions, they can then act as effective role models for other females seeking to thrive as leaders (Latu, Schmid, Lammers, & Bombari, 2013).

Finally, I aim to extend the practical contributions to not only female leaders but to other managers who do not display prototypical leadership behavior. While this includes people of different race, ethnicity, nationality, disability, and sexual orientation, it also encompasses any member of the organization whose behavior deviates from the norm. I hope through my findings that different groups of people who suffer from a range of negative biases would be able to use this information to find an adaptive way to be effective leaders.

1.4 THESIS STRUCTURE

Chapter 2

This chapter provides a comprehensive literature review of the two major trends examining the effectiveness of female leaders: relational demography research with a primary focus on gender dissimilarity between leaders and followers (Tsui & O'Reilly, 1989) and role congruity theory (Eagly & Karau, 2002) with the related fit theories (Heilman's lack of fit model; Heilman, 2001, and Rudman's status incongruity hypothesis; Rudman, Moss-Racusin, Phelan, & Nauts, 2012). After discussing the major pitfalls in the presented theories, the chapter concludes with proposing a new mechanism that can explain the effectiveness of female leaders.

Chapter 3

This chapter reviews the SITL (van Knippenberg & Hogg, 2003) being the underlying framework on which the model presented in Figure 3.1 is based. I draw on expectancy violations theory (Jussim et al., 1987) and the uncertainty reduction motive of the social identity framework (Hogg & Mullin, 1999; Reid & Hogg, 2005), particularly the application of uncertainty to demographic difference between leaders and followers (Chattopadhyay et al., 2011) to build the hypotheses. I then present my model and hypotheses.

Chapter 4

In this chapter, the research philosophy that underpins the chosen methodology for this thesis is described. Through providing a review of the history of philosophy of science, I discuss the dominant paradigms of positivism and interpretivism. Based on the fact that research in the gender and leadership arena is mature, I justify the use of quantitative methodology to test my model (Edmondson & Mcmanus, 2007).

Chapter 5

This empirical chapter describes the methodology used for each of Study 1 and Study 2. The sample, data collection technique, measures, and analytical methods used to analyse the data (analysis of co-variance and moderated mediation analyses for studies 1 and 2) are discussed (Edwards & Lambert, 2007; Field, 2009; Hayes, 2015). Furthermore, the findings of each of the studies along with a discussion, contributions, and limitations section are provided.

Chapter 6

This second empirical chapter describes the methodology used for Study 3. As in Chapter 5, the sample, data collection technique, measures, and analytical methods used to analyse the data (hierarchical regressions and moderated mediation analyses) are discussed (Edwards &

Lambert, 2007; Field, 2009; Hayes, 2015). Furthermore, the findings along with a discussion, contributions, and limitations section are provided.

Chapter 7

This final chapter integrates the findings reported in this thesis. The objectives of the thesis are highlighted along with the theoretical and practical contributions. I conclude with a section on the limitations of the thesis to later provide avenues for future research.

CHAPTER 2: LITERATURE REVIEW

CHAPTER SUMMARY

This chapter presents a literature review of the two major trends in research looking at gender and leadership. The first section of this chapter will be dedicated to the conceptualization of leadership effectiveness. In the subsequent section, research grounded in relational demography (Tsui & O'Reilly, 1989) will be reviewed along with the main theoretical frameworks used to explain the results. After an evaluation of the state of the literature in the relational demography approach, research guided by the role congruity theory (Eagly & Karau, 2002) and the related fit theories (Heilman's lack of fit model; Heilman, 2001, and Rudman's status incongruity hypothesis; Rudman et al., 2012) will be evaluated. The last part of the chapter will conclude by building on an existing theoretical framework and proposing a new mechanism and boundary conditions that will avail the chance for female leaders to be endorsed and considered effective.

2.1 CONCEPTUALIZATION OF LEADERSHIP EFFECTIVENESS

Prior to reviewing the literature on gender and leadership, it is important to provide a conceptualization of leadership effectiveness. Although there is a general consensus in the leadership literature that properly defining indices of leadership effectiveness are difficult to specify, leadership effectiveness has been mainly encapsulated by the leader's impact on the organisational bottom line processes. It has mainly been evaluated as the ability of the leader to facilitate the performance of individuals, groups, and organisations in meeting their goals (e.g., profitability of a unit, quality service of individuals, market shares gained) (Hogan, Curphy, & Hogan, 1994; Hunt, 1991; Yukl & van Fleet, 1992; Yukl, 2006). Evaluating leadership merely through 'performance', albeit highly commendable, poses myriads of challenges on its own, particularly because it is not only difficult to obtain such data but also, it is frequently impacted by extraneous variables that are above and beyond the leader's influence (Eagly et al., 1995; Hogan et al., 1994). In that light, leadership researchers advocated for other viable alternatives for

assessing leadership effectiveness, and proposed multiple criteria for effectiveness - namely in obtaining evaluations of leadership effectiveness provided by the leader's direct circle, including peers, superiors, and subordinates (Eagly et al., 1995). Although such subjective and one-sided ratings are prone to several biases (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), overall, they are largely consensual and moderately accurate (Malloy & Janowski, 1992). In addition, whilst being correlated with performance measures, evaluative ratings offer a good insight on leadership effectiveness (Hogan et al., 1994).

Apart from relying on either objective (e.g., performance) or subjective (e.g. subordinate evaluation) evaluations of leadership effectiveness, additional variables are also believed to be relevant. Leadership criteria captured via work-related attitudes in terms of follower satisfaction (leader satisfaction, job satisfaction), commitment, trust in the leader, follower empowerment, and motivation have also been used to portray the overall role of the leader (e.g., Avolio et al., 2003; Avolio, Zhu, Hoh, & Bhatia, 2004; Judge, Piccolo, & Ilies, 2004; Spreitzer, Janasz, & Quinn, 1999). In addition to work-related attitudes, when looking at the effectiveness of leaders, evaluating the quality of the leader-member exchange relationship (LMX) is perceived to be fundamental for both leader and subordinate behaviour (Martin, Guillaume, Thomas, Lee, & Epitropaki, 2016; Wayne, Shore, & Liden, 1997). For example, LMX is positively linked to various work-related attitudes and performance evaluations (Gerstner & Day, 1997; Ilies, Nahrgang, & Morgeson, 2007; Martin et al., 2016).

The multifaceted conceptualization of leadership effectiveness that includes not only performance measures, but also evaluative accounts of the leader's behaviour and LMX, along with work-related attitudes is prominent in leadership research and has been used in meta-analyses examining different leadership attributes and leadership effectiveness (e.g., Eagly et al., 1995, 1992; Judge, Bono, Ilies, & Gerhardt, 2002; Judge et al., 2004), experimental studies (e.g., Giessner & van Knippenberg, 2008; Pierro et al., 2005; Sauer, 2011; van Knippenberg & van Knippenberg, 2005), and field studies (e.g., Cicero, Pierro, & van Knippenberg, 2007; Giessner &

van Knippenberg, 2008; Pierro et al., 2005; Podsakoff, MacKenzie, & Bommer, 1996) where either one or several aspects of leadership effectiveness has been employed to evaluate leadership behaviour. Stemming from this stream of research, when reviewing the literature on gender and leadership, leadership effectiveness was conceptualized to encompass objective and subjective ratings of performance, evaluative accounts of leadership behaviour provided by either/and peers, subordinates, and superiors, work-related attitudes including but not limited to job and leader satisfaction, organizational commitment, affective commitment, and empowerment, and last but not least, the quality of the LMX relationship.

2.2 REVIEW OF THE RELATIONAL DEMOGRAPHY LITERATURE

2.2.1 General Overview of the Vertical Dissimilarity Literature

Two major streams of research cast attention at the gender and leadership effectiveness literature (Joshi, Neely, Emrich, Griffiths, & George, 2015). The first one is grounded in the relational demography literature which concerns the study of demographic composition and differences; i.e., demographic dissimilarity between co-workers (Tsui & O'Reilly, 1989). Tsui and colleagues introduced the concept of relational demography with the main tenet that individuals in diverse groups exhibit different work experiences based on their demographic characteristics relative to others with whom they work (Tsui, Egan, & O'Reilly, 1992; Tsui & O'Reilly, 1989). Inherent in this research paradigm is vertical dissimilarity which entails the demographic differences between a leader and their followers on demographic characteristics such as gender, race, ethnicity, nationality, education, tenure, sexual orientation, functional background, and marital status (Tsui & Gutek, 1999; Tsui & O'Reilly, 1989). Relational demography scholars examining the effect of dissimilarity in vertical dyads (leader – follower dyads) have examined how dissimilarity influences measures of leadership effectiveness such as LMX (Abu Bakar & McCann, 2014; Bhal, Mahfooz, & Aafaqim, 2007; Brouer, Duke, Treadway, & Ferris, 2009; Schaffer & Riordan, 2013), work-related attitudes (David, Avery, & Elliott, 2010;

Schaffer & Riordan, 2013; Wesolowski & Mossholder, 1997), and performance (Shore, Cleveland, & Goldberg, 2003; Tsui, Porter, & Egan, 2002; Wayne & Liden, 1995).

Research in relational demography was driven with the main contention that dissimilarity drives negative work outcomes for it negatively affects social dynamics such as integration and communication while similarity leads to favourable outcomes as it signals similar attitudes and beliefs that are frequently associated with characteristic perception and attitude formation (Tsui & Gutek, 1999; Tsui & O'Reilly, 1989). Nevertheless, empirical evidence under the vertical dissimilarity paradigm points to equivocal results at best. While several studies revealed negative outcomes for gender, age, tenure, race, ethnicity, and education dissimilarity on outcomes of leadership effectiveness (organizational commitment: Duffy & Ferrier, 2003; Green et al., 2005; Shore et al., 2003; role ambiguity and role conflict: Tsui & O'Reilly, 1989; trust in the organization and the leader: Duffy & Ferrier, 2003; Loi & Ngo, 2009; satisfaction with the supervisor: Vecchio & Bullis, 2001; and performance ratings: Loi & Ngo, 2009; Tsui & O'Reilly, 1989; Varma & Stroh, 2001; Wayne & Liden, 1995), others revealed no effect (trust: Duffy & Ferrier, 2003; Lau, Lam, & Salamon, 2008; commitment: Epitropaki & Martin, 1999; Green et al., 2005; job satisfaction: Epitropaki & Martin, 1999; Green et al., 2005; Murphy & Ensher, 1999b; Wesolowski & Mossholder, 1997; satisfaction with the supervisor: Vecchio & Bullis, 2001; intention to remain: Avery, Volpone, McKay, King, & Wilson, 2012; Vecchio & Brazil, 2007; LMX: Adebayo & Udegbe, 2004; Colella & Varma, 2001; Liden, Wayne, & Stilwell, 1993; Schaffer & Riordan, 2013; and performance measures: Bauer & Green, 1996; Farh, Tsui, Xin, & Cheng, 1998; Liden, Stilwell, & Ferris, 1996; Loi & Ngo, 2009; Vecchio & Brazil, 2007), while still others revealed a positive effect of vertical dissimilarity on various measures of leadership effectiveness (performance measures: Bates, 2002; Murphy & Ensher, 1999b; Vecchio, 1993; organizational commitment: Green, Anderson, & Shivers, 1996; trust in the leader: Farh et al., 1998; and LMX: Vecchio, 1993).

2.2.2 Gender review in the Vertical Dissimilarity Literature

Although research in vertical dissimilarity encompasses the whole range of demographic characteristics and is not explicitly devoted to examining gender, studies have predominantly included gender largely because of its pervasiveness and salience (Mackie, Hamilton, Susskind, & Rosselli, 1996; Riordan, 2000). Table 2.1 presents a summary of the empirical evidence and the used theoretical frameworks in the vertical dissimilarity literature that examined the effect of gender on measures of leadership effectiveness.

In line with the inconsistent results in the vertical dissimilarity literature, gender dissimilarity between leaders and followers has generated a plethora of mixed effects on measures of leadership effectiveness. For example, while several studies found that male and female subordinates with female supervisors reported the lowest levels of LMX and trust in the leader than other dyadic combinations (Adebayo & Udegbe, 2004; Farh et al., 1998; Loi & Ngo, 2009; Vecchio & Brazil, 2007), other demography researchers found that female leaders were rated as exhibiting high quality LMX with their subordinates (Murphy & Ensher, 1999). Apart from enjoying good LMX relationships with their male followers, research in vertical dissimilarity has also shown that female leaders were liked and exhibited high ratings of LMX when they engaged with a female follower. Moreover, the female leader – female follower dyad also exhibited good performance ratings (Varma & Stroh, 2001). However, in other studies female leaders with male subordinates did not exhibit any differences from male leaders with female subordinates on measures of performance and ratings of LMX (Bauer & Green, 1996; Farh et al., 1998; Liden et al., 1993; Schaffer & Riordan, 2013; Wells & Aicher, 2013)

In addition to empirical evidence on LMX, trust, and performance, researchers did not find any significant differences between female supervisors with male subordinates and other dyadic compositions on measures of leadership effectiveness such as organizational and employee commitment, job satisfaction, and intention to remain (Avery et al., 2012; Epitropaki & Martin, 1999; Farh et al., 1998; Green et al., 2005; Wesolowski & Mossholder, 1997). However,

additional studies revealed that female followers, more so than male followers, were less likely to be absent from work when reporting to a female leader and experienced higher levels of job satisfaction (Abu Bakar & McCann, 2014; Avery et al., 2012). In support of female leaders, results have also shown that male followers with female leaders exhibited high levels of commitment than when reporting to a male leader (Toga, Qwabe, & Mjoli, 2014). Nevertheless, other empirical evidence showed that male subordinates experienced heightened role ambiguity when they reported to female leaders than when they reported to male supervisors. On the other hand, female leaders were deemed effective by their female subordinates as opposed to their male subordinates (Tsui & O'Reilly, 1989). Contrary to the findings of Tsui and O'Reilly (1989), Vecchio and Bullis (2001) found that female leaders with female followers reported the lowest levels of satisfaction with the leader while also showing that male leaders with male and female followers reported good levels of leader satisfaction.

In summary, the state of the empirical evidence in the vertical dissimilarity literature is inconsistent at best. As such, there is no clear pattern as to when (dis)similarity yields positive, negative, or null effects. In this light, it cannot be inferred from the results how and when female leaders are considered effective.

2.2.3 Theoretical Frameworks

Several theoretical frameworks underpinned the vertical dissimilarity literature. Earlier theoretical perspectives (e.g., similarity-attraction paradigm, Byrne, 1971) presumed that group members would react similarly to dissimilarity (i.e., symmetric effects are observed, for example, male group members working with a female leader would experience dissimilarity effects in the same way as female group members working with a male leader). With the limitations of explaining dissimilarity effects in a symmetrical manner, later theories, such as the status congruency theory and relational norms (Erickson, Pugh, & Gunderson, 1972; Lawrence, 1998), acknowledged that asymmetrical effects are more prominent and thus dissimilarity is contingent on the demographic category that a group member belongs to (e.g., male group members

TABLE 2.1

Overview of the Effectiveness of Female Leaders in the Vertical Dissimilarity Literature

Authors	Nature of Dyad	Attitudinal Outcomes		Performance Outcomes		LMX	Theoretical Framework
		Nature of Outcome	Results	Nature of Outcome	Results	Results	
Tsui & O'Reilly (1989)	FL/FF	+ve	+ve	-ve	-ve	-	Similarity-attraction paradigm; Self categorization theory
	FL/MF	-	-	-ve	+ve	-	
	FL/FF	-	-	+ve	+ve	-	
Liden et al. (1993)	FL/FF	-	-	-	-	Null	Self categorization theory
Wayne & Liden (1995)	FL/FF	+ve	+ve	-	-	-	Similarity-attraction paradigm
Bauer & Green (1996)	FL/FF	-	-	+ve	Null	Null	Similarity-attraction paradigm
Green et al. (1996)	FL/MF	+ve	Null	-	-	-ve	Similarity-attraction paradigm
		+ve	Null	-	-	-	
		+ve	Null	-	-	-	
Wesolowsky & Mossholder (1997)	FL/MF	+ve	Null	-	-	-	Similarity-attraction paradigm; Social identity theory
		-ve	Null	-	-	-	
		+ve	-ve	+ve	Null	-	
Farh et al. (1998)	FL/FF	+ve	Null	+ve	Null	-	Similarity-attraction paradigm Status congruence
		-ve	Null	-	-	-	
		+ve	Null	-	-	Null	
Epitropaki & Martin (1999)	FL/FF	+ve	Null	-	-	-	Similarity-attraction paradigm
		+ve	Null	-	-	-	
Murphy & Ensher (1999)	FL/FF	+ve	Null	-	-	+ve	Similarity-attraction paradigm
		+ve	Null	-	-	-	
Varma & Stroh (2001)	FL/FF	+ve	+ve	+ve	+ve	+ve	Similarity-attraction paradigm
	FL/MF	+ve	-ve	-	-	-	
Vecchio & Bullis (2001)	FL/FF	+ve	-ve	-	-	-	Similarity-attraction paradigm; Self-categorization theory
Schaubroeck & Lam (2002)	FL/FF	-	-	+ve	Null	-	Similarity-attraction paradigm
Tsui et al. (2002)	FL/FF	-	-	+ve	+ve	-	Similarity-attraction paradigm
		-	-	+ve	Null	-	
Duffy & Ferrier (2003)	FL/MF	+ve	Null	-	-	-	Similarity-attraction paradigm
		+ve	-ve	-	-	-	
Somech (2003)	FL/MF	+ve	-ve	-	-	-	Similarity-attraction paradigm
Adebayo & Udegbe (2004)	FL/MF	-	-	-	-	+ve	Gender roles
	FL/FF	-	-	-	-	-ve	
Green et al. (2005)	FL/MF	+ve	Null	-	-	-	Self-categorization theory
		+ve	Null	-	-	-	
Bhal et al., 2007	FL/FF	-	-	-	-	+ve	Similarity-attraction paradigm
	FL/FF	-	-	+ve	-ve	-ve	
	FL/MF	-	-	+ve	+ve	-	
Vecchio & Brazil (2007)	FL/FF	+ve	+ve	-	-	-	Similarity-attraction paradigm; Social identity theory
	FL/FF & FL/MF	+ve	Null	-	-	-	
	FL/FF & FL/MF	-ve	Null	-	-	-	
		+ve	-ve	+ve	-ve	-ve	
Loi & Ngo (2009)	FL/MF	+ve	-ve	+ve	-ve	-	Similarity-attraction paradigm; Self-categorization theory
				+ve	Null	-	
Avery et al. (2012)	FL/FF	-ve	-ve	-	-	-	Similarity-attraction paradigm
		+ve	+ve	-	-	-	
Schaffer & Riordan (2013)	FL/MF	+ve	Null	-	-	Null	Social identity theory; Self-categorization theory
Bakkar & McCann (2014)	FL/FF	+ve	+ve	+ve	+ve	+ve	Similarity-attraction paradigm; Social identity theory
		+ve	+ve	+ve	+ve	-ve	
Hasan & Hatmaker (2014)	FL/MF			+ve	-ve		Similarity-attraction paradigm
Toga et al., (2014)	FL/MF	+ve	+ve	-	-	-	Similarity-attraction paradigm

Nature of dyad: FL refers to female leader, MF refers to male follower, FF refers to female follower; nature of outcome (-ve/+ve): if outcome is positive such as trust, organizational commitment, affect, liking, performance ratings, it is denoted by '+ve'; if outcome is negative such as role ambiguity, role conflict, absenteeism, and intention to quit, it is denoted by '-ve'; results: +ve = dyad had a positive effect on the outcome; -ve = dyad had a negative effect on the outcome; null = dyad did not affect the outcome

reporting to a female leader would experience different attitudes and behaviours than female

group members working with a male leader). Further advancing understanding of the

asymmetrical effects, the social identity perspective (Tajfel & Turner, 1986) has also been

employed to account for dissimilarity effects on work outcomes. Nevertheless, as will be argued in the subsequent parts of this chapter, the used theoretical frameworks do not provide a comprehensive explanation for vertical dissimilarity, and particularly for how and when female leaders drive effective work outcomes.

2.2.3.1 Similarity-Attraction Paradigm

The predominant theoretical framework used to explain the impact of vertical dissimilarity is Byrne's (1971) similarity-attraction paradigm. Based on social cognitive processes, the theory postulates that people are generally drawn, i.e., like and are attracted to others who share the same demographic characteristics for this projects common life experiences, values, and beliefs (Byrne, 1971). According to the similarity-attraction paradigm, individuals of the same demographic characteristics as opposed to dissimilar characteristics enjoy behaviour predictability and in that they find social interactions with each other less stressful and less uncertain (Meglino, Ravlin, & Adkins, 1991). For the reasons outlined above, the similarity-attraction paradigm asserts that as individuals are drawn to similar others on demographic attributes, this paves the way for interpersonal outcomes such as interpersonal attraction, positive affect, and trust (Byrne, 1971; Tsui & O'Reilly, 1989). On the other hand, dissimilar individuals on salient demographic characteristics such as gender are thought to experience negative work outcomes on the physical (e.g. leaving their work unit) and/or the psychological dimension (e.g. becoming less committed) (Perry, Kulik, & Zhou, 1999). Because the similarity-attraction paradigm assumes symmetric negative effects of dissimilarity despite the direction of the dissimilarity (e.g., same negative effects whether the leader is male or female with followers of dissimilar genders), the critical element in the paradigm is not the direction of dissimilarity but rather the degree of dissimilarity (Byrne, 1971). Applied to the vertical dissimilarity literature, Tsui and O'Reilly (1989) argued that positive evaluations of work effectiveness would be derived from demographic similarity because similar individuals 'like' working together; negative work outcomes are expected to derive from dissimilar dyads.

Empirically, however, the underlying mechanisms of the similarity-attraction paradigm (positive affect & liking) did not generate consistent results across gender similarities and work-related attitudes/performance-related outcomes (see Table 2.1). For example, while Murphy and Ensher (1999) found a null effect on liking between the female leader and her female followers, Varma and Stroh (2001) found a positive effect. In addition, as some studies postulated that similarity between the female leader and her follower would generate positive evaluations on performance measures (Tsui et al., 1992; Varma & Stroh, 2001), others found a null effect (Bauer & Green, 1996; Farh et al., 1998), while still others found a negative effect (Vecchio & Brazil, 2007).

In order to account for the mixed results, several boundary conditions were proposed to explain the outcome of gender in vertically dissimilar dyads under the lens of the similarity-attraction paradigm. Two studies examined the effect of the gender composition of the dyad on the relationship between leader behaviour and measures of leadership effectiveness generating inconsistent effects (Douglas, 2012; Duffy & Ferrier, 2003). Douglas (2012) looked at the moderating effect of the gender dyad on the relationship between transformational leadership and each of LMX and leadership effectiveness and what he found was, regardless of the gender of the follower, the dyad consisting of the female leader did not have a moderating effect. On the other hand, Duffy and Ferrier (2003) found significant moderating effects of gender dissimilar dyads between the leader behaviour and organizational commitment but found very weak support for trust in the leader.

In addition, several studies used demographic characteristics of the leader as potential moderators (Adebayo & Udegbe, 2004; Epitropaki & Martin, 1999; Vecchio & Brazil, 2007). As with the equivocal trend, moderator analyses oscillated between insignificant effects (Epitropaki & Martin, 1999), significant effects such as the female leader enjoys better quality LMX with her male versus female followers (Adebayo & Udegbe, 2004), and a mix of both, dependent on the outcome of leadership effectiveness (Vecchio & Brazil, 2007). Additional researchers looked at

the impact of the duration of acquaintance between the leader and the follower and found that the relationship between the gender dissimilar dyads deteriorated after time (Somech, 2003) while others found that similarity in the dyad, particularly when both members are female, contributed to less satisfaction with the supervisor the longer members worked together (Vecchio & Bullis, 2001). Last but not least, researchers also examined the role of supervisory and organizational support for equal opportunities (Vecchio & Bullis, 2001) and employment status (full-time vs. part-time) (Avery et al., 2012) without generating a consistent pattern of results on measures of leadership effectiveness.

Examining the underlying tenets of the similarity-attraction paradigm, a modest number of studies examined the mediating role of supervisory liking, affect, and LMX. Results of the mediation analysis did not provide a holistic explanation as to why female leaders drive leadership effectiveness. For example, while LMX mediated the relationship between gender dissimilarity and work satisfaction, it did not mediate the effects for organizational commitment (Green et al., 1996). In addition, supervisory liking significantly mediated the relationship between gender similarity and performance ratings in one study (Varma & Stroh, 2001), but it did not have a significant effect in another (Murphy & Ensher, 1999).

In summary, the similarity-attraction paradigm is most frequently used, but is not successful in explaining why female leaders in similar and dissimilar dyads can have a positive, negative, or neutral effect on measures of leadership effectiveness. Moreover, it has substantially failed in explaining why demographic dissimilarity between a female leader and her male follower can lead to positive work outcomes. With explored mediators and moderators also yielding inconsistent effects, a necessity for another theoretical framework that can better inform the effectiveness of female leaders is warranted.

2.2.3.2 Social Identity Theory and Self-Categorization Theory

Research on the effects of vertical dissimilarity on leadership effectiveness has also been grounded in the social identity theory (SIT) (Ashforth & Mael, 1989; Reynolds et al., 2003;

Tajfel & Turner, 1986) and its related theory – self-categorization theory (SCT) (Turner et al., 1987). The SIT stems from group membership and postulates how individuals are generally motivated to identify with groups with the aim of enhancing their self-esteem and reducing uncertainty (Hogg & Terry, 2000; Mullin & Hogg, 1999; Turner et al., 1987). As individuals have several personal selves that parallel different types of group membership, what compels an individual to associate with a particular social identity are characteristics and triggers in the social environment (Ashforth & Mael, 1989). In the field of vertical dissimilarity, gender forms a salient dimension of social identity as the leader and the follower work in close proximity which allows for challenges and comparisons to take place (Chattopadhyay, George, & Lawrence, 2004; Vecchio & Brazil, 2007). Thus, gender constitutes a salient category on which individuals form group memberships (Chattopadhyay, George, et al., 2004; Riordan, 2000), derive their self-identity (Turner et al., 1987), reduce uncertainty (Hogg & Terry, 2000; Reid & Hogg, 2005), preserve a positive image of their identity (self-enhancement) through engaging in between-group comparisons, and enhance their self-esteem (Turner et al., 1987; Williams & O'Reilly, 1998). This cognitive aspect of the SIT, the self-categorization process, segments the workplace into in-groups and out-groups (Tajfel & Turner, 1986) whereby individuals accentuate the positives of the in-group while downplaying those of the out-group. In doing so, they hold stereotypical beliefs that in-group members are more similar and thus easier to interact with than out-group members (Tajfel & Turner, 1986; Tajfel, 1982; Turner et al., 1987).

Based on the tenets of the SIT and SCT, two outlooks on leader-follower gender dissimilarity emerge. On the one hand, it is believed that the more demographically similar leaders and members are, the more socially integrated they become and the less the experience of uncertainty is regarding what is accepted and endorsed in the group. This process is believed to yield to positive outcomes of leadership effectiveness (Riordan, 2000; Tsui & O'Reilly, 1989; Vecchio & Brazil, 2007). However, looking at the empirical evidence, gender similarity in vertical dyads does not always yield positive outcomes (see Table 2.1 for full list) (e.g.,

Epitropaki & Martin, 2005; Farh et al., 1998; Wesolowski & Mossholder, 1997). Although via different mechanisms, this approach is similar in outcomes to those postulated by the similarity-attraction paradigm and studies have alluded to both theoretical frameworks simultaneously.

On the other hand, SIT/SCT would also postulate that the combination of the dyad plays an integral part in shaping positive versus the negative outcomes. Based on the self-enhancement motive in an attempt to acquire positive self-esteem, females, being considered low status in organizations, would prefer to distance themselves from their own demographic category and would rather associate with males who are considered of high status (Chattopadhyay, George, et al., 2004; Chattopadhyay, Tluchowska, & George, 2004; Ely, 1994; Tajfel & Turner, 1986). This re-categorization process is thought to affect female leaders in the sense that they might prefer to be leading a group of male followers as this association can reflect a positive self-image.

However, empirically, the self-enhancement motive did not receive full support in the vertical dissimilarity literature (e.g., Varma & Stroh, 2001; Wesolowski & Mossholder, 1997) (see Table 2.1 for full list).

When evaluating the approach of the SIT and the SCT, it becomes evident that in its current format the theory is not well suited to explain how and when female leaders thrive in leadership positions. One key reason underlying this shortcoming maybe the fact that studies in the vertical dissimilarity literature focused merely on the social integration/self-enhancement motives for predicting the effects of (dis)similarity (Schaffer & Riordan, 2013) and overlooked other processes that are central in the SIT perspective, i.e., uncertainty reduction (Hogg & Mullin, 1999; Reid & Hogg, 2005). While the uncertainty reduction hypothesis under the SIT perspective is successful in explaining the effects of (dis)similarity in other parts of the relational demography literature (co-worker dissimilarity) (Chattopadhyay, George, et al., 2004; Guillaume, van Knippenberg, & Brodbeck, 2014), how it has been applied to explain the effects of vertical dissimilarity falls short in accounting for the inconclusive results. This shortcoming can be

mainly attributed to the fact that central mechanisms in the SIT, namely the uncertainty reduction hypothesis, have not been explored yet in the vertical dissimilarity literature.

2.2.4 Summary of Results in the Vertical Dissimilarity Literature

In sum, research in the vertical dissimilarity literature has generated a plethora of equivocal results where a consistent pattern and theoretical framework that can account for the effectiveness of female leaders is lacking. Several factors come to play when evaluating the vertical dissimilarity approach. Firstly, it is well worth noting that the majority of the examined dyads took the form of a male manager with female employees, which limits the understanding of when and how female leaders are effective when in leadership positions (Green et al., 1996; Murphy & Ensher, 1999; Somech, 2003; Vecchio & Brazil, 2007). Secondly, the predominant studies were conducted under the lens of the similarity-attraction paradigm which does not assume asymmetrical differences whereby asymmetrical differences exist based (at least) on the gender of the leader (e.g., Brescoll, Uhlmann, Moss-Racusin, & Sarnell, 2012; Eagly & Karau, 2002). The subsequent part of this chapter will be dedicated to discussing those differences. Thirdly, as numerous boundary conditions were tested without a coherent explanation as to why female leaders are effective, this necessitates a shift in focus from (dis)similarity to a comprehensive theoretical framework that takes into account the complexities of leader gender, follower gender, and their interaction.

2.3 STEREOTYPE FIT THEORIES

The second stream of research examining the effectiveness of female leaders shifts focus from the dyadic perspective and looks at the overall differences in leadership effectiveness between male and female leaders. In a plethora of studies, researchers addressed this question and two meta-analyses were conducted that summarize the state of the science on the effectiveness of female leaders, namely Eagly et al. (1995) who looked at the overall effectiveness of leaders and Paustian-Underdahl et al. (2014) who examined perceptions of leadership effectiveness, with each of the studies presenting an overall finding that female leaders are considered as effective as

male leaders. Overall results of the meta-analyses are presented in Table 2.2 along with studies conducted after 2011. However, a fine-grained analysis of the results speaks against this generalization. For starters, what appears to be critical to the success of leaders of either gender is the extent to which the leadership role is defined in either masculine or feminine terms and is thus congruent with the gender of the occupant (Eagly et al., 1995; Paustian-Underdahl et al., 2014). Additionally, male leaders fared much better in organizations that are male-typed and male-dominated, such as the military and governmental institutions (Eagly et al., 1995; Paustian-Underdahl et al., 2014), whereas weak tendencies were observed for female leaders in organisations that are female-typed and female-dominated, such as social services and education (Eagly et al., 1995). Nevertheless, the advantages accrued by female leaders in female-typed organizations was not observed in Paustian-Underdahl et al.'s analysis which warns against further generalizations. Of interest in both meta-analyses is the fact that female leaders were rated slightly more favourably in business settings than their male counterparts (Eagly et al., 1995; Paustian-Underdahl et al., 2014). While this finding is generic in nature, and as organizational leadership roles are still regarded as stereotypically-male (Cejka & Eagly, 1999; Heilman, 2001; Koenig et al., 2011; Powell et al., 2002), a further investigation of the nature of the business settings that favours female leaders is necessary.

Several theoretical frameworks were cast to explain the effectiveness of female leaders. The two most influential of those theories placed considerable emphasis on gender roles and stereotypes in the evaluation and underrepresentation of female leaders, namely Heilman's lack of fit model (Heilman, 1983, 1995) and, the more prominent, Eagly and Karau's role congruity theory (RCT) (Eagly & Karau, 2002). Due to the general overlap in the mentioned theories, an overview of the lack of fit model will be first presented followed by an extensive review of the role congruity theory, being the theory most widely used. An empirical appraisal will follow.

TABLE 2.2

Overview of the Effectiveness of Female Leaders in the RCT and Related Fit Theories

Authors	Attitudinal Outcomes		Performance Outcomes		Theoretical Framework
	Nature of Outcome	Results	Nature of Outcome	Results	
Eagly et al. (1995)*	Effectiveness	Insignificant differences	Subjective measures	M > F	Social Role Theory
	Motivation	Insignificant differences	Objective measures	Insignificant differences	
	Satisfaction	F > M	Overall performance	M > F	
Paustian-Underdahl et al. (2014)*	Effectiveness	Insignificant differences	-	-	RCT
Douglas (2012)	Effectiveness	F > M	-	-	Double Standards of Competence
	LMX	M > F	-	-	RCT
Hoyt & Burnette (2013)	Role occupancy	M > F	-	-	RCT
Thoroughgood et al. (2013)	-	-	Errors	Insignificant differences	RCT
Wang et al. (2013)	-	-	Creativity	Insignificant differences	RCT
	-	-	In-role performance	Insignificant differences	Attribution Theory
	-	-	OCB	Insignificant differences	
Thomas et al. (2014)	Job satisfaction	M > F	-	-	Gender Discount Problem
Hoogh et al. (2015)	Effectiveness	Insignificant differences	-	-	Social Role Theory
Lanaj & Hollenbeck (2015)	Effectiveness	Insignificant differences	-	-	Expectancy Violation Theory
Triana et al. (2016)	Commitment (Turkey)	M > F	-	-	RCT
Triana et al. (2016)	Commitment (USA)	Insignificant differences	-	-	

* Refers to meta-analytic studies. M = male leader, F = female leader

2.3.1 The Lack of Fit Model

Considered a seminal predecessor for the RCT (Eagly & Karau, 2002), the lack of fit model (Heilman, 1983, 1995) posits that the degree of success of a leader hinges on the held expectations of the people rating the leader's behaviour. Specifically, performance expectations are a function of the fit between the leader's skills and abilities and how those fit the requirements of the job. As expectations are thought to profoundly affect the evaluation processes, if the perceived fit is good, then success is believed to follow; if the perceived fit is poor, then failure will follow.

Expectations for a leader's behaviour are largely informed by the pervasive and widely shared stereotypical beliefs about the attributes and characteristics of males and females which dominate the workplace (Burgess & Borgida, 1999; Heilman, 2001). In sum, male leaders are expected to be competent, aggressive, confident, and assertive, i.e., *agentive*, whereas female leaders are expected to be *communal*, i.e., sympathetic, warm, kind, nurturing and helpful (Abele, 2003; Eagly, Wood, & Diekmann, 2000; Heilman, 2012; Hoyt & Murphy, 2015; Koenig et al., 2011; Rudman & Glick, 2001). Those gender-based stereotypes are not only limited to descriptive biases in the sense of how male and female leaders *are*, but they also extend to form prescriptive gender biases thus laying forth norms of behaviour of how male and female leaders

should be, thus forming holistic gender roles that go beyond mere stereotypical beliefs (Eagly, 1987; Heilman, 2001). That the majority of organizational leadership roles continue to be stereotypically male or male-typed (Cejka & Eagly, 1999; Koenig et al., 2011; Powell et al., 2002; Powell, 2012; Schein, Mueller, & Lituchy, 1998) necessitates a male-like behaviour (agentic) under the lack of fit model. This poses inherent challenges for female leaders who do not characteristically ‘fit’ organizational leader roles, not only because of the communal characteristics attributed to them, but also because of the expectation that they should not behave in a male-like manner. When those expectations are violated, female leaders are ‘penalized’ by being rated less favourably (Heilman, 1983, 2001).

2.3.2 Role Congruity Theory

Stemming from social role theory (Eagly, 1987) which explains how social roles comprise shared expectations about how individuals ought to behave when occupying social positions or when they are members of a certain social category (Biddle, 1986), the RCT (Eagly & Karau, 2002) specifically draws on gender roles that constitute consensual beliefs about the characteristics of males and females that are seminal in promoting sex differences in behaviour (Eagly et al., 2000). As explained above, gender roles are based on descriptive and prescriptive or injunctive norms that span above and beyond stereotypical gender beliefs. As descriptive norms are encompassed by what is commonly known as stereotypes, injunctive norms refer to consensual expectations about how each gender is to behave (Eagly & Karau, 2002). The RCT advances social role theory and considers the congruity of the gender role with other prominent roles that an incumbent occupies, especially leadership roles. In doing so, the RCT looks at perception of congruity and the potential key processes and factors underlying this process that have the potential to culminate in prejudiced-like behaviour (Eagly & Karau, 2002).

Considered very similar to Heilman’s lack of fit model, the RCT advances the former model by joining the social-cognitive research on stereotyping and prejudice with organizational research on leadership (Eagly & Karau, 2002). In doing so, the RCT extends the scope of the lack

of fit model by providing room for considering boundary conditions that affect the underlying mechanisms of both theories.

In a nutshell, the RCT proposes two types of prejudices against female leaders. The first type of prejudice stems from descriptive norms, whereby the theory postulates that the prejudice females are likely to face when they occupy leadership roles is a result of the incongruity of their gender roles with that of leadership roles as leadership roles are largely considered stereotypically-male (demanding agentic behaviour) (Koenig et al., 2011; Powell, 2012; Schein et al., 1998; Schein, 2001). Precisely, the lack of endorsement and positive evaluation of actual or potential female leaders arises from the inconsistency evaluators hold between the communal characteristics attributed to females and the agentic qualities required for success in a leadership role (see Cejka & Eagly, 1999; Heilman, 1995, 2012). Although this form of prejudice hinges on the extent to which leadership roles are defined more in agentic or masculine attributes and less in communal ones (Eagly & Karau, 2002), there is a general belief that leadership roles are characteristically male-typed, specifically in first-line and top-managerial positions with the notion of ‘think manager, think male’ (Bass & Bass, 2008; Heilman, 1983; Koenig et al., 2011; Powell et al., 2002; Powell, 2012; Schein, 2001). Furthermore, the RCT suggests that female leaders will be more subject to prejudice when being rated by male subordinates as opposed to female subordinates because leadership is considered a male prerogative (Eagly & Karau, 2002). Other factors, such as feminine personal characteristics, gender ratio in the workplace, and information overload of evaluators can also accentuate the extent of prejudice female leaders face as proposed by the RCT (Eagly & Karau, 2002).

The second form of prejudice emanates from injunctive or prescriptive norms particularly when female leaders fulfil the requirements of leadership roles and adopt more agentic-like behaviour while not showing enough communal characteristics associated with their gender role. In this case, female leaders are likely to receive less favourable evaluations of their actual leadership behaviour because such behaviour deviates strongly from their prescribed gender roles

and is consequently seen as less desirable. Thus, when behaving counter-stereotypically and in counter-gender roles, female leaders are prone to backlash (Eagly & Karau, 2002; Rudman & Phelan, 2008). The ‘backlash’ effect against female leaders has also been studied under the *status incongruity hypothesis* (Rudman & Phelan, 2008). Although more explicit in the description of when females in general are subject to backlash, the status incongruity hypothesis posits that as females are generally considered of lower status than males (Balkwell & Berger, 1996; Correll & Ridgeway, 2003; Rudman & Glick, 2001), when they occupy leadership positions and behave more agentic, they undermine the presumed differences between the genders and thus pose a threat to the gender hierarchy. In this regard, females are then penalized for provoking the system that gives males more power and resources (Rudman et al., 2012; Rudman & Phelan, 2008) which makes them prone to harsher scrutiny and unfavourable evaluations.

The RCT also proposes contingency factors upon which the second prejudice is elicited. For example, the RCT suggests that in order for female leaders to attenuate the effect of the second prejudice, they are advised to engage in both communal and agentic behaviours, regardless of whether the leadership role requires communal elements. Furthermore, the RCT posits that the second prejudice is dependent on the degree to which female leaders engage in agentic behaviour, proposing a direct relationship between agency and backlash (Eagly & Karau, 2002).

Being the predominant theoretical framework under which the effectiveness of female leaders has been examined, most of the core tenets of the RCT have received empirical support across a range of studies. In two meta-analyses on gender and the effectiveness of leadership (Eagly et al., 1995; Paustian-Underdahl et al., 2014), several claims of the RCT were confirmed. Heavily male-typed leadership positions, such as the military, were shown as more favourable towards male leaders over female leaders and rated the former more effective. Additionally, male leaders were deemed more effective in first-line managerial positions as that necessitated the use of agentic behaviour, whereas female leaders fared better in middle-level leadership roles for that

required more communal behaviour. Moreover, male subordinates favoured male leaders over female leaders when the leadership role was stereotypically male, while when the role was stereotypically-female, the reverse was found. On the other hand, several of the postulations of RCT were not supported in the 1995 meta-analysis. For example, while the RCT postulates that female leaders are subject to prejudice per se as their gender role is perceived to be incongruent with a leadership role, when removing studies from the analysis that examined highly masculine leadership roles such as the military, females were rated as effective as male leaders, with an even slight advantage tilted towards them. In addition, meta-analytic results did not find an overall difference between study contexts which counters the RCT's proposition that prejudice against female leaders would be higher in organizational contexts due to cognitive overload (Eagly et al., 1995; Eagly & Karau, 2002).

The lack of complete support of the tenets of the RCT is also evident in an updated meta-analysis on gender and the perceptions of leadership effectiveness which further sheds light on several caveats and limitation of the ability of the theory to account for findings (Paustian-Underdahl et al., 2014). Overall, results revealed that male leaders were deemed more effective in some cases whereas females were deemed more effective in others. To probe for those differences, Paustian-Underdahl et al. (2014) found, like Eagly et al. (1995), that male leaders were regarded as more effective to the extent that the organization or leadership role was male-dominated. However, contrary to the findings of Eagly et al., Paustian-Underdahl et al. did not find similar effects for female leaders in female-dominated leadership roles. More so, the recent meta-analysis revealed a distinctive pattern in that, although not being the gender majority, female leaders were rated more effectively in business settings as opposed to male leaders which contradicts the RCT. In addition, Paustian-Underdahl et al. (2014) did not find that male raters in male-dominated groups favoured male leaders over female leaders which is also a major refutation of the RCT (Eagly & Karau, 2002). Additionally, contrary to the RCT, this meta-analysis found that as the percentage of female raters increased, so did the evaluation of the

effectiveness of female leaders – RCT would argue that males, considered a high-status token (Kanter, 1977), would be seen as more congruent by the female raters. Moreover, when looking at ratings other than self-ratings, female leaders were rated as slightly more effective than male leaders in senior level positions, which also contradicts one of the basic cornerstones of the RCT. Finally, as found by Eagly et al. (1995), the current meta-analysis did not find that cognitive overload played a significant effect in accentuating prejudice against female leaders in organisational settings.

Additionally, the extent to which the RCT is able to explain recent findings in the endorsement of female leaders is limited. Particularly, empirical evidence on whether backlash effects are evident if a female leader engages in agentic leadership behaviour is mixed (e.g., Amanatullah & Morris, 2010; Amanatullah & Tinsley, 2013; Heilman, 2012). While the RCT postulates that as female leaders engage in agentic leadership behaviour, they are consequently evaluated as behaving less communally (Eagly & Karau, 2002; Ridgeway, 2004; Rudman & Phelan, 2008) and thus deemed less effective, a study by Rosette and Tost (2010) showed that female leaders at the top of the organisational hierarchy were deemed not only as more effective leaders than their male counterparts, but also received higher ratings on agentic as well as on communal traits than male leaders. This finding comes in stark contrast to the RCT especially that the boost female leaders received was larger on the agentic than on the communal dimension (Rosette & Tost, 2010). Similarly, in another recent study, researchers found that female leaders who engage in agentic leadership behaviour were rated as effective as their male counterparts, emerging and over-emerging as leaders the more they engaged in agentic behaviour (Lanaj & Hollenbeck, 2015).

2.3.3 Summary of the Fit Theories

In summary of the overall evaluation of the RCT and related fit theories, it is apparent from meta-analytic evidence that the RCT enjoys partial support in explaining the effectiveness of female leaders. This partial support points to the caveats of the theory in not being able to

advance our understanding of when and how female leaders are deemed effective and equally endorsed as their male counterparts. Moreover, while the RCT offers several contingency factors that can accentuate prejudice against female leaders, not only has empirical evidence shown that the proposed boundary conditions are not all effective (see Douglas, 2012; Eagly et al., 1995; Paustian-Underdahl et al., 2014), but also the proposed mechanisms are passive in nature. In this regard, the RCT does not lay forth moderating variables on what behaviours female leaders need to engage in to attenuate the prejudice directed against them when in leadership positions (Eagly & Karau, 2002).

Furthermore, although the case of gender and leadership may seem like a ‘solved-issue’ at this point as no significant differences were found in the overall effectiveness between either gender, this conclusion is alienated from reality (Paustian-Underdahl et al., 2014). Males are still predominantly being appointed in leadership roles in addition to being more rewarded than their female counterparts (Blau & Kahn, 2007; Catalyst, 2016b, 2016c; Joshi, Son, & Roh, 2015). When appointed, female leaders are likely to find themselves in precarious leadership positions that are doomed to fail (Ryan et al., 2015). Apart from the lack of effective representation, evidence also points that with fine-grained analysis, female leaders are not deemed effective in all organizational leadership roles and there is inconsistency as to what female leaders need to engage in in order to be effective (Eagly et al., 1995; Eagly & Karau, 2002; Heilman, 2012; Paustian-Underdahl et al., 2014; Rosette & Tost, 2010; Rudman et al., 2012).

2.4 OVERALL SUMMARY

In taking stock of the state of the science explaining the effect of gender on leadership effectiveness, two key conclusions are relevant. Firstly, the inconclusive empirical findings with the lack of a coherent theoretical framework that can explain the results in the gender dissimilarity literature warrants a call for a change in perspectives in how the literature has been addressed so far. With inconsistent results, it might be that the interaction between leader and follower gender is not the critical element that leads to leadership effectiveness. Rather, it seems

that leader gender plays a much more crucial role in the process. Secondly, with the results of the recent meta-analyses in contradiction to several of the postulations of the RCT and related fit theories, it becomes evident that a new theoretical framework needs to be investigated that can explain how and when female leaders are deemed effective.

Despite current advancements in the field of gender research pointing to a gradual decrease in stereotypes, we are still at a time where males are often regarded as better leaders than females with the general contention of “think manager, think male” (Koenig et al., 2011; Powell et al., 2002; Powell, 2012; Schein et al., 1998; Schein, 2001). Although female leaders are frequently considered as effective as male leaders (Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010), they often continue to be perceived as occupying an incongruent role and atypical in most leadership positions (Eagly & Karau, 2002; Koenig et al., 2011; Powell, 2012). This evidently calls for a change in perspective to a more encompassing theoretical framework that takes into consideration the social intricacies in which leadership occurs. In this regard, a theoretical model based on the *social identity theory of leadership* (SITL) (Hogg et al., 2012; van Knippenberg & Hogg, 2003) which is an extension of the SIT and the SCT (Tajfel & Turner, 1986; Turner et al., 1987) is proposed. The SITL places the role of the leader as primarily a group member and postulates that group members are likely to emerge and be accepted as leaders when they are considered prototypical – that is embodying a fuzzy set of attributes (e.g., attitudes, feelings, behaviours) that capture in-group similarities and out-group differences (Rast et al., 2012; van Knippenberg, 2011). Under the SITL, the success of the leader is contingent on the extent to which they are considered prototypical and there is numerous research that asserts the influence of leadership group prototypicality on an array of measures of leadership effectiveness (e.g., Cicero et al., 2007; Giessner & van Knippenberg, 2008; Hogg et al., 2012; Pierro et al., 2005; van Knippenberg, 2011).

Unlike the relational demography approach which necessitates demographic similarity between the leader and the follower as the basis for leadership effectiveness (Tsui et al., 1992;

Tsui & O'Reilly, 1989), the SITL posits that the choice of a prototypical leader does not have to include demographic characteristics; it is rather the behaviour that the leader engages in that renders them prototypical or not (van Knippenberg, 2011). In the way that female leaders might be considered non-prototypical in organizational leadership roles that are predominantly masculine (Eagly & Karau, 2002; Heilman, 2012; Koenig et al., 2011), the SITL advances RCT in offering a way forward for originally non-prototypical leaders to become prototypical. While the RCT is passive in providing contingency factors that would render female leaders accepted in organizational leadership roles, research in the SITL has shown that originally non-prototypical leaders can engage in an array of behaviours that would eventually portray them as prototypical and thus accepted in their roles (e.g., Giessner & van Knippenberg, 2008; Rast et al., 2012; van Knippenberg & van Knippenberg, 2005). The details of the proposed conceptual model will be discussed in the following chapter.

CHAPTER 3: THEORETICAL FRAMEWORK

CHAPTER SUMMARY

In this chapter, I review the SITL (van Knippenberg & Hogg, 2003) as the underlying framework on which the conceptual model is built. I argue that female leaders need to engage in a stereotypically-male behaviour to be considered prototypical members of the group that they lead. In doing so, I draw on expectancy violations theory (Jussim et al., 1987) and argue that female leaders who engage in counter stereotypical behaviour will be evaluated more favourably than their male counterparts who engage in the same behaviour. I further build on the uncertainty reduction hypothesis (Hogg & Terry, 2000; Reid & Hogg, 2005) with its application to demographic differences between leaders and their followers (Chattopadhyay et al., 2011) and postulate that female leaders evoke feelings of uncertainty in their followers, and more strongly in the male members. With previous research asserting that followers yearn for highly directive and even autocratic leadership styles in times of uncertainty (Rast et al., 2013), the role of leadership styles is incorporated in the model and particularly directive and participative leadership as they capture the stereotypical attributions of gender and leadership (Eagly & Johnson, 1990; Heilman, 2012). I then posit that female leaders are considered prototypical leaders when they resort to directive leadership as opposed to participative leadership, particularly with their male followers, as the former constitutes an atypical leadership behaviour for females and serves to reduce uncertainty. On the other hand, I argue that male leaders are considered prototypical when they engage in participative leadership as opposed to directive leadership, particularly with the male followers. Leadership group prototypicality will then in turn pave the way for leadership effectiveness.

3.1 OVERVIEW OF THE UNDERLYING THEORETICAL FRAMEWORK OF SITL

Placing the role of the leader as a group member centre-stage and thus capturing the implications that this has on leadership effectiveness, the SITL draws on research in group processes, social influence, and identity (Hogg et al., 2012). The SITL is grounded in the SIT

perspective (Tajfel & Turner, 1986) and more specifically in the extension of the SIT - the SCT (Turner et al., 1987) which explains how social categorization of self and others into prototype-based depersonalizations creates a social identity (Hogg & Terry, 2000). With groups being important for self-definition (Reynolds et al., 2003), under SCT, both self and others are categorized in terms of in-group or out-group members in an aim to accentuate similarity to the in-group or in-group prototype which is a cognitive representation of a set of attributes that prescribes and describes what the group represents and what the norms of the group are (Hogg & Terry, 2000; Reynolds et al., 2003). Under SCT, individuals undergo a process of depersonalization whereby they are regarded as an embodiment of the group prototype. Therefore, individuals are no longer seen with their own unique self-conception but are rather seen as group members.

Prototype representations are fundamental in defining groups as distinctive entities, thus maximizing similarities within and differences between groups (Abrams & Hogg, 2010; Hogg & Terry, 2000). Prototypes represent a fuzzy set of attributes that captures a representation of the exemplary or ideal group member – in a sense, they represent what the group believes, feels, behaves, and thinks (Hogg & Terry, 2000). Group prototypes are context-dependent and are amended by the characteristics of the social interactive context (Abrams & Hogg, 2010). Having the maximum meta-contrast of intergroup and intragroup differences, the group prototype is powerful in shaping the group and members seek them out to define the group identity (Hogg & Terry, 2000; Hogg et al., 2012). When the group is instrumental for self-definition and as depersonalization occurs, in-group members are motivated to learn about the attributes of the group, to capture a clear image of the group prototype. Hence, they embody the group prototype, internalize it, and conform to the norms of the group.

3.1.1 Motivations Underlying SIT/SCT

In the early discussions on the motivations underlying the SIT/SCT, and up until recently (e.g., Hogg & Mullin, 1999; Hogg & Terry, 2000; Hogg, 2011; Mullin & Hogg, 1999), the

emphasis was predominantly guided by the self-enhancement motive (Tajfel & Turner, 1986; Turner et al., 1987). Theories in this domain posited the importance of identifying and engaging with a group, i.e., having a social identity, for that avails the opportunity for individuals to engage with intergroup social comparisons and to do so in in-group favouring manners, thus securing positive self-esteem (Turner et al., 1987; Turner, 1982). It is the desire to attain and preserve favourable self-esteem that guides the self-enhancement motive culminating in the self-esteem hypothesis (Abrams & Hogg, 2010; Hogg & Mullin, 1999). It is worth highlighting that the manner in which individuals pursue the self-enhancement motive is contingent on the context they are in – in terms of how ‘the other’ groups compare on status, legitimacy, and permeability (Abrams & Hogg, 2010; Tajfel & Turner, 1979).

More recent analyses of the SIT/SCT unveiled another underlying motivation that prompts individuals into categorizing themselves as part of groups – namely the uncertainty reduction hypothesis (Hogg & Mullin, 1999; Hogg & Terry, 2000; Hogg, 2011; Reid & Hogg, 2005). Hogg and colleagues postulate that one of the primary motives that guides self-categorization emanates from a need to reduce uncertainty particularly around one’s feelings, behaviour, attitudes, and beliefs. Although several ways exist by which one can reduce uncertainty (e.g., interpersonal comparisons), one of the most effective mechanisms is self-categorization in relation to a well-defined and prescriptive group prototype (Abrams & Hogg, 2010; Hogg & Terry, 2000; Hogg, 2011). Uncertainty thus guides identification with a contextually-salient social category by motivating individuals to affirm their social identity and construct prototypes to reduce uncertainty. Individuals are likely prompted to join relevant groups because such well-constructed entities reduce uncertainty (Hogg, 2011). Therefore, in addition to upholding a positive image of oneself, self-categorization reduces uncertainty through altering self-conception and integrating one’s self with a well-defined prototype that prescribes and describes attitudes, perceptions, feelings, and behaviour (Hogg & Terry, 2000). Both self-enhancement and uncertainty reduction are fundamental motivations underlying social identity –

in some situations, such as when the group's boundaries are threatened, reducing uncertainty might be more important as it defines the norms of the group while in other situation, such as when the group's reputation is threatened, the self-enhancement motive might be more adaptive (Abrams & Hogg, 2010; Hogg & Terry, 2000).

3.1.2 The Role of Leadership - SITL

Stemming from either of the discussed motives, as group membership becomes salient, members internalize the group's self-defining prototype which guides what one feels, behaves, thinks, does and how one is perceived by others (Hogg et al., 2012). Hence, having a clear and well-defined group prototype is essential and group members resort to those individuals whom they deem to be the most reliable sources to inform the group prototype – ideally the most prototypical members (Hogg & Terry, 2000; Hogg et al., 2012; Hogg, 2011). In that light, highly prototypical members, in contrast to non-prototypical members and to less prototypical members, are favourably evaluated and considered reliable which gives them disproportionate influence over the group's identity and behaviour (Hogg, 2001; Hogg & Terry, 2000; Steffens et al., 2014; van Knippenberg & Hogg, 2003).

Therefore, the basis of the SITL stems from the fundamental role that groups play in shaping one's identity and in defining what one is, and how one feels, behaves and thinks (Hogg et al., 2012; van Knippenberg & Hogg, 2003). Indeed, SITL proposes that leadership is a recursive process based on a leader's capacity to represent, create, advance, change, and embed a shared social identity for group members (Reynolds et al., 2003; Steffens et al., 2014; van Knippenberg & Hogg, 2003). Highly prototypical members, having prescriptive influence over the group's prototype, occupy a leadership position and become entrepreneurs of identity in that members look up to them to define their identity, enhance their self-esteem and reduce uncertainty (Steffens et al., 2014). Group prototypical leaders do not merely have to be considered 'one of us' to gain follower endorsement but they also have to portray other dimensions of the social identity process, namely identity advancement 'doing it for us' which

entails that the leader advances and promotes the welfare of the group above their own, identity entrepreneurship ‘crafting a sense of us’ which encompasses how leaders shape and clarify the group’s values and practices, and identity impresarioship ‘making us matter’ which involve practices the leader engages in that helps clarify the structure and boundary of the group (Steffens et al., 2014). Thus, effective leadership rests on the shoulders of the member who is perceived to resemble the group prototype the most and in that, leader group prototypicality weakens the impact that leadership prototypes (implicit leadership theory; Lord, Foti, & De Vader, 1984; Lord & Hall, 2003) have on leadership effectiveness (Hogg et al., 2012).

The SITL proposes key processes by which prototypical members rise up to leadership positions and exhibit leadership effectiveness: influence, social attraction, legitimacy, and trust (Hogg et al., 2012; van Knippenberg & Hogg, 2003). Based on the above discussion, it is now clear that prototypical group members are more informative about the group prototype and group members turn to them to reduce their uncertainty and to make sense of ambiguous situations (van Knippenberg & Hogg, 2003). While enjoying this influence over the group, prototypical members are imbued with referent power (French & Raven, 1959) and ascribed to a higher status in the group as members favour to be led by a prototypical leader (Ridgeway, Johnson, & Diekma, 1994; Ridgeway, 2004; van Knippenberg & van Knippenberg, 2005). Thus, prototypical members appear to demonstrate effective influence over the group and are typically regarded as the ones with the most reliable information about the identity of the group (Hogg et al., 2012).

Furthermore, as group members like and hold more positive views of members of their in-group versus the outgroup (Abrams & Hogg, 2010; Turner et al., 1987), group members also tend to feel more positive and like prototypical members more than non-prototypical members as they are more representative of the group identity (Fielding & Hogg, 1997; Hogg, 1993). This provides opportunity for prototypical members to exercise influence over the group and gain compliance for their ideas (Byrne, 1971; Hogg et al., 2012).

In addition, as prototypical members embody the group prototype as part of their identities, they engage in group-serving behaviour that promotes the in-group and treat group members fairly (Abrams & Hogg, 2010). When prototypical members engage in such behaviours, they assert their credentials in the group, become imbued with legitimacy (Tyler, 1997), and open the path for other members and followers to trust them (Giessner & van Knippenberg, 2008; Platow & van Knippenberg, 2001; van Knippenberg & van Knippenberg, 2005).

Ample research has been done on the effect of leader group prototypicality on leadership effectiveness. Early research on leader group prototypicality indicated that as people identified with their groups, leadership support and effectiveness were derived from notions of leader group prototypicality as opposed to leadership prototypes which encompass stereotypical attributes of the leader (Fielding & Hogg, 1997; Hains, Hogg, & Duck, 1997; Hogg, Hains, & Mason, 1998). It is worth noting that even though the effect of leader group prototypes on leadership effectiveness are contingent on identification, there is strong evidence that suggests that regardless of identification, in group settings, the effects are strong and positive (Barreto & Hogg, 2017; van Knippenberg, 2011). Further studies cemented the effectiveness of prototypical leaders (Cicero et al., 2007; Giessner & van Knippenberg, 2008; Hirst, van Dick, & van Knippenberg, 2009; Hogg et al., 2006; Pierro et al., 2005; Platow & van Knippenberg, 2001; van Knippenberg & van Knippenberg, 2005). In an additional series of studies, the SITL proposed mechanisms by which originally non-prototypical leaders can position themselves to be accepted in leadership positions. As prototypical leaders do not need to engage in group-serving behaviour to be trusted and considered effective by their group members (Platow & van Knippenberg, 2001), van Knippenberg and van Knippenberg (2005) demonstrate how self-sacrificial behaviour exercised by non-prototypical leaders would render them accepted and thus effective in their leadership positions. Additionally, research has shown that non-prototypical leaders can be endorsed and deemed effective when they engage in group-favouring decisions (Platow & van Knippenberg,

2001), in group-oriented rhetoric (Platow et al., 2006), and in procedural fairness (Giessner & van Knippenberg, 2008).

3.1.3 Group Prototypes (SITL) versus Leadership Prototypes (Leadership Categorization Theory)

It is clear that leadership group prototypicality hinges on the extent to which the leader resembles the group prototype, i.e., the group's prototype constitutes a benchmark upon which leaders are implicitly judged (van Knippenberg & Hogg, 2003; van Knippenberg, 2011). In another stream of research grounded in the social cognition literature (Nye & Brower, 1996), scholars have referred to 'leadership prototypes' which encompass mental representations of how leadership is ought to be (Lord et al., 1984; Lord & Hall, 2003). The conceptualization of leadership prototypes is best captured under Lord and colleagues' *leadership categorization theory* (LCT) (Lord et al., 1984) and is largely based on categorization theory which entails how individuals get organized and process information more efficiently through developing categories (Rosch, 1978). Prototypes are thought to emerge from categories and to represent an original form or type that serves as a standard example of other things in that same category (Rosch & Mervis, 1975). For example, a leadership prototype might emerge from the 'male' category and in that, an acting leader is judged on the basis of gender. Under LCT, leadership prototypes represent each individual's own mental image of who a leader is and how a leader should be which paves the way for the categorization process to occur. In this process, termed *recognition-based process*, individuals compare their leader against a set of preconceived knowledge structures (i.e., leadership prototype) (Lord & Maher, 1991). It is this process of implicit comparisons to pre-existing benchmarks that determines whether an individual is accepted in a leadership position. If there is match between a person's leadership prototypes and the target, then the target is categorized as a leader and in that, they are more favourably evaluated (Eagly & Karau, 2002; Ensari & Murphy, 2003; Epitropaki & Martin, 2005). While some leadership prototypes may vary among people (e.g., Keller, 2000), contexts (Lord et al., 1984; 2000),

cultures (e.g., House, Hanges, Javidan, Dorfman, & Gupta, 2004) and follower characteristics (whether followers view themselves possessing prototypical leadership qualities) (van Quaquebeke, van Knippenberg, & Brodbeck, 2011), people tend to hold similar perceptions of ideal leadership rendering leadership prototypes context-free and holistic constructs of leadership (Epitropaki & Martin, 2004). Leadership prototypes are thought to be socially shared whereby some categories of people are more likely to fit the implicit assumptions than others, for example White and male (Eagly & Karau, 2002; Ridgeway, 2004; Scott & Brown, 2006; van Quaquebeke et al., 2011).

An important consideration of leadership prototypes – as opposed to group prototypes - is the fact that they regard leadership categories as nominal categories, i.e., cognitive groupings of situations that define ‘good’ leadership but in themselves do not exhibit a psychological existence as a group (Hogg, 2001). Thus, in the leadership prototype literature, leadership is regarded as a product of individual information processing rather than a structural component of groups or as a natural characteristic of psychological group membership (Hogg, 2001). In this light, under leadership prototypes, individuals judge good leadership based on their individual conception of an ideal leader – the benchmark is a product of individual beliefs of what an ideal leader is.

One area in which group prototypes and leadership prototypes converge is in introducing a bias in favour of male leadership (van Knippenberg, 2011). Given the gendered nature of leadership (Eagly & Karau, 2002), leadership prototypes are guided by stereotypes that inform responses to male and female leadership and particularly introduce a bias against female leadership. In the same token, stereotypical beliefs of leadership also influence group prototypes – with organisations being mostly male-dominated, stereotypically male characteristics are more likely to be regarded as group prototypical (Gartzia, 2011; Koenig et al., 2011).

However, the LCT and SITL differ in central and primal aspects in how they account for the effect of gender dissimilarity/gender literature on leadership effectiveness. Firstly, under the

LCT perspective, theorists aimed to construe an image of ideal leadership to help explain the gender differences on leadership effectiveness – an approach largely subsumed under the role congruity theory (Eagly & Karau, 2002). However, being considered rather stable characteristics of ideal leadership (Epitropaki & Martin, 2004), leadership prototypes were unable to account for the inconclusive findings in the gender dissimilarity/gender leadership literature (see Eagly et al., 1992; Paustian-Underdahl et al., 2014; Tsui & O'Reilly, 1989). For example, while the role congruity theory postulates that female (male) leaders would be effective in leadership positions to the extent that the position is in congruence with their gender roles, Paustian-Underdahl et al., (2014) confirmed this hypothesis for male leaders but not for female leaders. In addition, they found that female leaders were deemed more effective in certain roles that were male-dominated (business settings) (Paustian-Underdahl et al., 2014). (For a full review of the RCT, please refer to section 2.3.2). On the other hand, the SITL adopts a more malleable perspective highlighting the seminal role of the context in which the leader operates in. In this perspective, SITL gives leverage for the leader to create and carve the group's identity – thus shaping what is considered prototypical (Steffens et al., 2014).

Secondly, although LCT and SITL both view leadership perceptions as a function of the social categorisation process, they differ over the role of psychological group membership (van Knippenberg & Hogg, 2003; van Knippenberg, 2011). To clarify which mechanism (group prototype versus leadership prototype) underlies leadership perceptions, proponents of the SITL have proposed that while both processes are legitimate, the relative importance of each is contingent on the extent to which people identify with their groups (i.e., have a strong identity salience) (Hogg, 2001). Much to the agreement of both parties (Lord & Hall, 2003; van Knippenberg & Hogg, 2003), numerous research findings point in this exact direction; the more people identify with their groups, the more they govern their perceptions, attitudes, and behaviour based on their social identity and in that respect, the more they are guided by the group prototype as opposed to the leader prototype (Barreto & Hogg, 2017; Fielding & Hogg, 1997; Hains et al.,

1997; Platow & van Knippenberg, 2001). This distinction proves fundamental for the research undertaken in this thesis whereby the focal point of concern is group membership and the role that leaders manifest being ‘representative’ members of their groups.

Stemming from these core differences between the LCT and SITL perspectives, what becomes more fundamental in explaining the impact of leader gender on leadership effectiveness is not a static, holistic view of leadership, i.e., LCT, but rather a more fluid approach whereby leaders are first and foremost group members who are able to shape and carve the group’s norm, beliefs, and identity to eventually render themselves prototypical (Steffens et al., 2014). In addition, when guided by the group prototype, leaders act as entrepreneurs of identity whereby they can shape followers’ identities and even alter the respective group norm (Hogg et al., 2012; Steffens et al., 2014). In this light, as followers belong to a group – an aspect which is particularly pronounced in organisational settings (Barreto & Hogg, 2017), they look up to leaders to derive information about who they are and what their group represents – an act that further emphasizes the importance of group prototypes.

3.1.4 Gender and the SITL

Being the most pervasive demographic characteristic and a source for stereotyped-based impressions (Mackie et al., 1996), gender constitutes an integral aspect on how people are perceived and how effective they are regarded in leadership positions (Correll & Ridgeway, 2003; Eagly & Karau, 2002; Eagly, 1987; Gartzia, 2011; Ridgeway, 2004). *Status Characteristic Theory* (Correll & Ridgeway, 2003; Ridgeway, 2001), a sub-theory of the *Expectations States Theory* (Berger, Rosenholtz, & Zelditch, 1980) offers a comprehensive explanation on the way individuals form perceptions and make work-related attributions (task-related competence, leadership effectiveness) based on gender. Status characteristics encompass socially noteworthy attributes on which people differ with the general postulation that individuals generate social worthiness, performance expectations, and attribute higher levels of competence to others based on certain *diffuse* characteristics (i.e., characteristics that carry general expectations for

competence) such as gender (Correll & Ridgeway, 2003; Ridgeway, 2001, 2004). Status characteristics, for which there are widely engrained beliefs in the culture, holds that some groups of people are labelled as ‘high status’, typically males, and in that aspect, they are regarded as more competent, better performers, and bestowed with higher social worthiness than ‘low status’ individuals, i.e., females. As leadership is directly related to group task competence and ascribed with higher societal status, it is then more plausible for high status individuals to emerge as leaders and be positively regarded by followers (Ridgeway, 2004; Webster & Foschi, 1988). This is mainly due to the fact that people tend to attribute leader-like behaviours, influence, legitimacy, and expertise to high status individuals (males) and follower-like behaviours to low status members (females) (Ridgeway, 2004; Zelditch, 2001).

On the other hand, held stereotypes and prejudices have been highlighted among the core reasons that impede the effectiveness and advancement of female leadership (e.g., Brescoll, 2015; Eagly & Heilman, 2016; Heilman, 2012). Gender-based stereotypes heavily impact whether individuals perceive a leader to be competent or not. Gender-based stereotypes represent generalizations about the attributes of males and females (Burgess & Borgida, 1999; Eagly & Karau, 2002) and they are manifest in *descriptive* or *prescriptive* forms (details explained in Chapter 2). The content of gender stereotypes has been extensively studied whereby researchers have come to agree that *agency* (achievement orientation, inclination to take charge, autonomy, and rationality) is taken to be the defining attribute of the male stereotype and *communality* (concern for others, affiliative tendencies, deference, and emotional sensitivity) as the defining characteristic of the female stereotype (Abele, 2003; Eagly et al., 2000; Heilman, 2012).

The communal and agentic attributes ascribed to males and females constitute a perpetual backdrop to social interactions thus tainting judgements made about individuals and leadership occupants in organisational roles (Wood & Eagly, 2010). It should be well noted that the fact that gender stereotypes are more damaging for female leaders does not stem from beliefs that communality is negative. Rather, it is grounded in the pretence that communality is not conducive

for effective leadership, particularly in leadership roles that are stereotypically-male (Koenig et al., 2011; Powell, 2011).

As individuals get assimilated to group stereotypes, a penalty is enacted on female leaders despite the possibility of whether they possess the required qualities for leadership roles (Koenig et al., 2011; Rudman & Phelan, 2008). Similar to the status characteristic theory, the penalty culminates in unfavourable performance expectations that drive biased judgements and less-favourable expectations (Eagly et al., 1992; Heilman, 2001).

In light of gender stereotypes and status characteristic theory, in an organizational context, individuals firstly turn to demographic characteristics, particularly gender due to its salience, to form the basis for group categorization (Hogg & Terry, 2000). Ideally, a unified group prototype is formed when members of the organisational group also belong to the same gender. When it is not the case, low-status members, i.e., females, are typically considered marginal to the group and are thus not perceived as providing pertinent information towards construction of the group prototype (Chattopadhyay, George, et al., 2004; Chattopadhyay, Tluchowska, et al., 2004). In sum, females are not considered to be prototypical members of the groups.

Moreover, as a majority of organisations are male-dominated and/or endorse stereotypically-male leadership characteristics, male leadership characteristics are more likely to be regarded as prototypical of the group (Gartzia, 2011; Koenig et al., 2011; Powell et al., 2002; Powell, 2012; van Knippenberg, 2011). Although the SITL does not hypothesize that leadership group prototypicality rests on demographic characteristics, a study by Hogg et al. (2006) showed that group prototypes may also be gendered and succumb to the commonly held gender stereotypes. In Hogg and colleagues' experiment, researchers found that individuals who ascribe to traditional gender norms and who identify strongly with their groups (high identity salience) evaluated a leader favourably if the impressions formed about the leader's gender category

(stereotypes) matched the group's prototype. For example, they found that in instrumental groups, male leaders were rated as more prototypical than female leaders (and vice versa for expressive groups) provided that members held stereotypical gender beliefs and exhibited high identity salience. The implications of this study is fundamental in paving the way for the relationship between gender and the SITL. To the extent that organisational and group prototypes are essentially more stereotypically male than female (Cejka & Eagly, 1999; Eagly & Heilman, 2016; Heilman, 2012; Koenig et al., 2011), and to the extent that individuals uphold traditional gender stereotypes, males are more likely than females to be considered prototypical leaders of high salience groups. Interestingly, the implications of the Hogg et al. study span even further – it is not the leader's gender per se that informs leadership group prototypicality, rather it is the match between the gender-related impression of the leader and the group prototype whereby a good match indicates high leadership group prototypicality and a low match indicates a low leadership group prototypicality.

In taking stock of the issue of gender and the SITL, one conclusion is relevant: As leadership group prototypicality does not hinge on demographic characteristics, the extent to which the held gender stereotypes matches the group prototype becomes of vital importance. In a sense, as organisational leadership roles are mostly male-typed and as traditionally held gender stereotypes are still pervasive in the workplace (Brescoll, 2016; Eagly & Heilman, 2016; Heilman, 2012), it becomes evident that a prototypical member of the group, and thus the person most likely to be endorsed in a leadership position, is either male or, more importantly, possesses male-like attributes. The case that female leaders are considered non-prototypical per se is evident from the 'glass-cliff' effect where organisational groups tend to appoint non-prototypical members in leadership positions that are destined to fail – thereby attributing failure to a non-prototypical leader (Hogg et al., 2012; Ryan & Haslam, 2005). However, SITL conceives of leaders not as passive subjects who are dependent on group members' evaluations alone but instead suggests that leaders are and can be entrepreneurs of the group's identity and define what

is considered prototypical and what not (van Knippenberg & Hogg, 2003). More specifically, research by Steffens and colleagues (2014) suggests that whether leaders are perceived to be prototypical does not only hinge on whether the leader is considered one of the group but also on whether the leader can make the group matter, craft the groups' identity and is concerned about the welfare of the group. Thus, whether a male or female leader is considered prototypical is likely to depend on their gender and those of their followers informing the extent to which they are considered one of the group or not but also on the actions they engage in. In the following it is therefore argued that the extent to which follower and leader gender facilitate or undermine leadership effectiveness hinges on the leadership they employ and is mediated by the extent to which they are perceived to be prototypical.

3.1.5 The SITL and the Uncertainty Reduction Motive

Recent developments in the social identity research have shed light on how the desire to reduce uncertainty – the uncertainty reduction hypothesis - is a prime motive for group membership and leadership endorsement (Hogg & Mullin, 1999; Hogg & Terry, 2000; Hogg, 2001). The uncertainty-reduction hypothesis postulates that people are driven to reduce feelings of uncertainty, particularly when it relates to their identity and self-concept. While feelings of uncertainty are aversive and people strive to fend them off, feeling certain about oneself and other people allows one to be in better control of their social environment in the sense of understanding and predicting interactions with others (Hogg & Terry, 2000). Group identification provides a solid ground to which individuals can foster certainty on how to behave, what is required of them, and how they are perceived and relate to others through conforming to well-defined group prototypes (Grieve & Hogg, 1999; Hogg et al., 2012; Reid & Hogg, 2005).

Under uncertainty, people look up to leaders to provide a clear and unambiguous group norm to which they can abide by. Research looking at different manifestations of self-uncertainty (need for cognitive closure, role ambiguity, self-uncertainty) asserted that under elevated levels of uncertainty, people yearn for leadership per se whereby they would display increased support for

an established prototypical leader over a non-prototypical one (Cicero et al., 2009; Pierro et al., 2005) but this effect would be weakened or even disappear in the case of an incumbent leader (Rast et al., 2012). With increased uncertainty, individuals strive for an identity anchor and structural clarity and they thus long for highly entitative groups that are imperative for self-definition (Hogg & Terry, 2000; Reid & Hogg, 2005) and that are characterized by clear roles where there is a structural division between a leader and followers (Hogg, 2005).

Relating these insights to the case of gender and leadership, Chattopadhyay et al. (2011) introduced the uncertainty reduction hypothesis to relational demography research and in that, they highlight how demographic categories (e.g., gender) can foster uncertainty and drive uncertainty reduction behaviour. Specifically, Chattopadhyay et al. suggest that individuals are prone to two types of uncertainties in their workgroups (with their team members and/or with their leaders). The first type of uncertainty, *norm uncertainty*, is manifest when an individual does not have a clear picture about the group norms as in how to behave and what is expected of them (Chatman, 2010). The second type of uncertainty, *instrumental uncertainty*, relates to feelings of uncertainty regarding the overall competence and ability of the group to reach the desired group goals. In this regard, individuals feel uncertain about whether being a member of the group will aid them in reaching instrumental outcomes (Chattopadhyay et al., 2011). In their conceptualization of the uncertainty reduction model, Chattopadhyay et al. (2011) incorporate the status hierarchy characteristics literature with the social identity perspective as the latter proposes that individuals respond to the status of their own demographic categories and that of others dependent on how status is distributed in their groups.

A core consideration of whether individuals are likely to experience norm uncertainty and/or instrumental uncertainty is contingent on the gender categorization of the occupational prototype and whether their leader fits into the category (Chatman, Boisnier, Spataro, Anderson, & Berdahl, 2008; Chattopadhyay et al., 2011). To the extent that stereotypes governing organizational leadership roles are still male-dominated (Cejka & Eagly, 1999; Eagly & Heilman,

2016; Heilman, 2012; Koenig et al., 2011; Powell et al., 2002; Powell & Butterfield, 2017; Powell, 2012), and that female leaders are regarded as non-prototypical leaders in those leadership roles (Eagly & Karau, 2002; Hogg et al., 2012; Ryan & Haslam, 2005), as well as the extent that female leaders, considered low-status, are not attributed with legitimacy and competence to thrive and be accepted in leadership positions (Berger et al., 1980; Ridgeway, 2004; Vial, Napier, & Brescoll, 2015), I will argue in my conceptual model that a female leader will instigate feelings of uncertainty, both norm and instrumental pending on the follower gender, that can be attenuated if she resorts to clear and directive behaviour where she prescribes the group norms and showcases her competence and ability in reaching the group goals. I posit that once a female leader attenuates the uncertainty of her followers, she will be considered prototypical and drives leadership effectiveness. On the other hand, male leaders – considered high status and hence imbued with legitimacy and leader-like attributes (Eagly & Karau, 2002; Ridgeway, 2001, 2004) – is likely to be perceived as the norm in occupying a leadership role. He will not be prone to elicit heightened uncertainty in his followers and would not need to resort to directive leadership to assert his position; rather, he will be much better accepted if he engages in participative leadership (see Sauer, 2011; Subašić et al., 2011)

3.1.6 Leadership Styles and Uncertainty Reduction

The traditional leadership literature has addressed how uncertainty, albeit task clarity and structure, can be lessened through the use of leadership styles (for an overview, see Bass & Bass, 2008). For example, Fiedler's contingency theory of leadership argues that when the task is poorly structured, individuals have a preference for a directive task-oriented leadership style (Fiedler, 1964; Schriesheim, Tepper, & Tetrault, 1994). Furthermore, path-goal theory (House, 1971, 1996) postulates that a leader's primary function is to clarify the follower's path and further argues that when a follower is unclear about their goals or tasks, a leader is more effective when they engage in directive leadership that explains the structure of the task at hand. Further

evidence also points to task-oriented leadership style having a positive impact on follower performance mainly because it resolves task-related ambiguity (Judge et al., 2004).

Although the prevailing leadership literature advocates for directive or task-oriented leadership under task-related uncertainty, it does not fully capture notions of self-uncertainty postulated by the uncertainty reduction hypothesis and the related norm and instrumental uncertainty. Research under the SITL and the related uncertainty reduction hypothesis has shown that directive and even autocratic leadership is conducive to reducing uncertainty and increasing leadership effectiveness (Rast et al., 2012, 2013). In the study by Rast and colleagues, researchers showed how under heightened levels of self-uncertainty, engaging in an autocratic leadership style rendered the leader more prototypical and thus more effective. In a similar vein, I will argue in my conceptual model that since a female leader is likely to induce uncertainty in her followers, when she resorts to directive leadership, this would allow her to attenuate the uncertainty of her followers, be considered more prototypical and consequently more effective in her leadership role. On the other hand, I will argue that since male leaders are not likely to evoke heightened uncertainty in their followers, there is no need for them to engage in directive behaviour to prescribe group norms and provide followers with structure. Rather, it might be more beneficial for them to engage in a softer and more relationship-oriented approach to establish their prototypicality as they would not only be able to drive long-term effects (DeRue, Nahrgang, Wellman, & Humphrey, 2011; Judge et al., 2004) but they would also not be viewed as being unnecessarily assertive (Subašić et al., 2011).

3.1.6.1 Leadership Styles

It has become evident that leadership behaviour is essential for attenuating the uncertainty felt by followers, and this has been shown with uncertainty related to the task (e.g. Fiedler, 1964; House, 1996) and with broad manifestations of self-uncertainty (Rast et al., 2013). According to the leadership literature, leadership behavior primarily resides over two orientations; one directed towards structuring followers' work processes, namely a task-oriented approach and another in

which the leader engages followers in managing the work process – a relationship-oriented approach (Bass & Bass, 2008; Stogdill, 1974). This distinction initially developed in the Ohio State studies on leadership (Halpin & Winder, 1957; Halpin, 1957; Stogdill, 1963) where task-orientation was labelled *initiating structure* and emphasized the role of subordinates in following rules, the maintenance of high performance through abiding by set goals and objectives, and explicit distinction between roles. The relationship-oriented approach, subsumed under *consideration structure* encompassed behaviors pertaining to helping followers, looking out for their well-being, engaging with them for decision making, and being amiable and available.

Another distinction in the leadership literature that captures task and relationship-oriented leadership follows from early experiments on leadership (Lewin, Lippitt, & White, 1939). Two leadership styles, namely *democratic versus autocratic* were developed by a number of researchers (Lippitt & White, 1943; Vroom & Jago, 1988) whereby autocratic leadership is encompassed under task-oriented leadership with a major emphasis on having the leader as the sole decision maker. Democratic leadership, on the other hand, invites followers to take an active part in decision making and is subsumed under relationship-oriented leadership.

Task and relationship-oriented leadership styles are mostly regarded as separate and relatively orthogonal where a leader can engage in either behavior (Halpin & Winder, 1957). This distinction became more evident under the contingency theories of leadership such as path-goal theory and situational leadership theory (House, 1971, 1996) where a leader adopts the style that best fits the context at hand. Rarely however, task and relationship-oriented leadership are considered bi-polar opposites of a single continuum (e.g., Fiedler, 1964).

Overall meta-analytic evidence reveals that task and relationship-oriented leadership approaches influence leadership outcomes with a relationship-oriented approach relating more strongly to follower satisfaction, leadership effectiveness and motivation, and task-oriented leadership impacting more strongly on job performance (Judge et al., 2004). Although a narrower

description of leadership behavior, directive and participative leadership will be considered in my model as they relate to gender stereotypes and fully depict agentic versus communal behavior associated with male and female leaders (Bass & Bass, 2008; Eagly & Johnson, 1990).

3.1.6.2 Directive Leadership

On the task-oriented leadership styles lies *directive leadership* which is defined as leadership behavior targeted at structuring, organizing, and managing a follower's tasks (e.g., Korsgaard, Schweiger, & Sapienza, 1995; Somech, 2006). In essence, directive leadership is concerned with gaining a follower's compliance with directions stipulated by the leader (Bass, 1990). This leadership style relies on the position power imbued from the organizational structure rather than personal power to influence follower outcomes (French & Raven, 1959; Yukl & Falbe, 1991). Directive leadership aids followers in resolving task and role-related ambiguity and provides them with external monitoring and feedback on their performance which in turn lessens process and motivational losses allowing them to fare better in their jobs (House, 1996; Kahai, Sosik, & Avolio, 2004). Directive leadership is similar to autocratic leadership from Vroom and Jago's (1988) decision-making model and emphasizes behaviors concerned with providing followers with detailed instructions, expecting them to follow those directions, and inviting limited to no follower input while making decisions (Pearce & Sims Jr, 2002). Because directive leaders provide followers with specific, role and task-relevant directions which helps them concentrate their effort on their assigned tasks, research evidence purports that a leader's directive behavior renders task accomplishment easier for followers (Fiedler, 1964; Kahai et al., 2004). Furthermore, directive leaders assist followers in gaining better clarity of their roles thus reducing ambiguity as to what is required of them and what each follower needs to do (Kahai et al., 2004; Pearce & Sims Jr, 2002). Directive leadership also makes clear the availability of resources (Yukl, 2006) and the clear dissemination of objectives and goals (Keller, 2006; Pearce & Sims Jr, 2002). Research has demonstrated a clear link between directive leadership and follower and team performance (Judge et al., 2004; Lorinkova, Pearsall, & Sims Jr., 2013).

Overall, directive leadership subsumes characteristics that have been associated with *male-like* behavior (e.g., being dominant and controlling). Directive leadership thus encompasses an agentic leadership style that has mainly been associated with a male-stereotypical behavior (Correll & Ridgeway, 2003; Eagly & Johnson, 1990; Ridgeway, 2004).

3.1.6.3 Participative Leadership

Participative leadership, on the other hand, corresponds more to the relationship-based style and assumes a consultative approach with subordinates prior to making a decision relating to a task (Bass & Bass, 2008; Bass, Valenzi, Farrow, & Solomon, 1975). Participative leadership encourages followers to manage themselves, promotes discussions rather than providing direction, and promotes information sharing and teamwork (Amabile, Schatzel, Moneta, & Kramer, 2004; Arnold, Arad, Rhoades, & Drasgow, 2000; Pearce & Sims Jr, 2002; Yun, Faraj, & Sims, 2005). Participative leaders encourage their followers to express their opinions and ideas, delegate responsibility, and provide opportunities for subordinates to take initiative (House, 1971; Vroom & Jago, 1988). Leaders who engage in participative leadership styles are more reliant on personal power derived from their experience, status, and persuasiveness (Yukl & Falbe, 1991). Participative leadership is similar to democratic leadership and emphasizes behaviors related to sharing information and taking into account follower input on task management and objectives (Arnold et al., 2000). In that light, participative leaders create a sense of psychological ownership of a task, elevated commitment to the job, more learning opportunities, and better coordination and collection information processing (e.g., Lorinkova et al., 2013; Yun et al., 2005).

Participative leaders are usually accorded with high levels of job and leader satisfaction from their followers primarily because they instill participative and collaborative norms among their followers and encourages them to take responsibility. Such behavior has been repeatedly linked to positive individual and work group outcomes (e.g., Pearce et al., 2003). Participative leadership has also been found to have a positive effect on employee performance. A study by Zhang and Bartol (2010) found that empowering leadership, a similar construct to participative

leadership, improves employee creativity through its influence on follower psychological empowerment and intrinsic motivation. On a similar note, participative leaders positively impact follower performance through increasing their levels of self-efficacy and adaptability (Ahearne, Mathieu, & Rapp, 2005).

Participative leadership is most effective when there is a considerably good level of task structure and low levels of ambiguity (House, 1971; Yun et al., 2005). Such situations avail the opportunity for the leader to exercise participative leadership and not compromise task effectiveness as evident by the situational approaches to leadership (Bass & Bass, 2008). Generally, participative leadership is associated with *female-like* characteristics (e.g., being a good listener, sympathetic). Participative leadership thus encompasses a communal leadership style that has mainly been associated with a female-stereotypical behavior (Correll & Ridgeway, 2003; Eagly & Johnson, 1990; Ridgeway, 2004).

3.1.6.4 Gender Differences in Leadership Styles

With pervasive proscriptive and prescriptive gender stereotypes at play (Fiske, 2000; Prentice & Carranza, 2002), it is not surprising that specific leadership styles get ascribed to either male or female leaders (Eagly & Johnson, 1990). As men are believed to be masculine, instrumental, or agentic (e.g., more aggressive, dominant, independent, self-assertive, and self-sufficient), women are regarded to be feminine, expressive, or communal (e.g., more concerned with others, helpful, kind, warm, sympathetic, empathetic, and selfless). This distinction between males and females on their overall behavioral tendencies and expectations is believed to influence their leadership behavior with more task-oriented, autocratic, and instrumental styles being dubbed as *masculine leadership styles* while relationship-oriented, democratic, and expressive styles referred to as *feminine leadership styles* (Klenke, 1996).

Emanating from gender stereotypes, it would thus be plausible to expect that male and female leaders engage in different leadership styles. However, empirical evidence is weak at best (Eagly, Johannesen-Schmidt, & van Engen, 2003; Eagly & Johnson, 1990; van Engen, van der

Leeden, & Willemssen, 2001). In a meta-analysis on studies of task-oriented, relationship-oriented, and democratic versus autocratic leadership, Eagly and Johnson (1990) concluded that female leaders tend to engage in more interpersonal and people-oriented leadership than their male counterparts. However, the effect sizes were small and becoming negligible when the study setting was taken into account (organizational settings versus laboratory settings).

When looking at democratic versus autocratic leadership, Eagly and Johnson (1990) found, with small albeit robust effects, that female leaders tended to adopt a more democratic or participative style while men engaged in more autocratic or directive leadership behavior thus asserting the agentic versus communal aspects of gender stereotypes. In a comparable meta-analysis on the differences in which male and female leaders adopt transformational, transactional, or laissez-faire leadership, researchers found that female leaders tended to exercise significantly more transformational leadership (a leadership style which resembles democratic leadership whereby it emphasizes active participation of followers, intellectual stimulation and involvement in decision making (Avolio & Bass, 1997)), though the differences were small (Eagly et al., 2003). With again very small effects generated from meta-analytic evidence, results from more contemporary studies are mixed with some indicating that female leaders engage in more participative forms of leading (e.g., Rohmann & Rowold, 2008; for a literature review, see Trinidad & Normore, 2005), while others found no differences between genders (e.g., Barbudo, Fritz, Marx, Fritz, & Matkin, 2007).

Overall, although the difference in leadership styles between male and female leaders is small, the direction of the difference abides by the commonly-held gender stereotypes with females being more communal (participative) and males being more agentic (directive) (Eagly & Johnson, 1990; Eagly & Karau, 2002; Heilman, 2012). However, since female leaders are likely to evoke feelings of uncertainty in their followers (Chattopadhyay et al., 2011) and since uncertainty can be attenuated by engaging in more directive leadership behavior (Rast et al., 2013), it is therefore crucial to consider the effects of defying the gender stereotypes and

engaging in an atypical leadership style, in this case directive leadership, will have on the effectiveness of a female leader. In the same token, as male leaders are not likely to evoke heightened uncertainty that necessitates the use of directive leadership. In fact, as male leaders engage in such behavior, they might be viewed as unnecessarily assertive (Sauer, 2011); hence, it is also important to consider the effect of them deviating from their prescribed leadership behavior and resorting to participative leadership – a typical communal leadership behavior.

While initially several researchers have postulated that for a female leader to be successful, she must engage in stereotypically-male leadership behaviors (such as directive) (Eagly & Karau, 1991; Rudman & Glick, 2001), pioneers in the field have later on posited that such atypical behavior is likely to conjure backlash against female leaders, primarily because such behavior deviates from the female gender role (Eagly & Karau, 2002; Koenig et al., 2011; Rudman & Phelan, 2008). Moreover, female leaders are not imbued with legitimacy to exercise agentic leadership styles and are consequently evaluated harshly if they do (Eagly & Carli, 2015; Eagly et al., 1992; Heilman, 2012; Ridgeway, 2001). In this manner, female leaders are believed to constantly be in a dilemma whereby they are damned if they conform to gender stereotypes and damned if they do not (Rudman et al., 2012; Rudman & Phelan, 2008).

Nevertheless, empirical evidence on whether female leaders who engage in agentic or directive behavior hurts them is varied pointing to the importance of the context in which agentic behavior is enacted (e.g., Heilman, 2012). For example, several studies have shown that as females display agentic behavior, they experience backlash on the expense of organizational rewards and evaluations on communality (e.g., Heilman, Wallen, Fuchs, & Tamkins, 2004; Rudman & Glick, 1999). Interestingly, other studies have found that backlash effects against agentic behaviors are particularly pronounced in the presence of doubt regarding the female's contribution to a task (Heilman & Haynes, 2005). Further developments in research on the 'backlash' effect revealed an important twist as to when agency does not invoke backlash: In a series of experiments by Amanatullah and Morris (2010) and Amanatullah and Tinsley (2013),

researchers found that females who engage in other-advocating agentic and directive behavior are not subject to backlash effects. In a sense, those females are still seen as ascribing to the female gender stereotype in caring for the collective. In addition, several other studies have shown that females tend to benefit from displaying agentic behaviors (e.g., Lanaj & Hollenbeck, 2015; Post, DiTomaso, Lowe, Farris, & Cordero, 2009; Rosette & Tost, 2010) – findings that can be explained by the expectancy violations theory (Jussim et al., 1987).

It is worth noting that male leaders are also subject to the backlash effect whereby deviating from their masculine norm is also not favorably evaluated (Rudman & Fairchild, 2004; Rudman et al., 2012; Rudman & Phelan, 2008). Nevertheless, since male leaders are ascribed higher status in organizations and imbued with legitimacy and attributions of competence to lead (Ridgeway, 2004; Vial et al., 2015), they tend to enjoy more leverage in their leadership behavior. Recent findings have shown that high status individuals, such as male leaders, are more endorsed when they engage in participative as opposed to directive leadership (Sauer, 2011). In line with Sauer (2011), Subašić et al. (2011) found that ingroup leaders, such as males, can exert better influence if they used softer power tactics. As argued above, these findings can be accounted for by the expectancy violations theory (Jussim et al., 1987).

3.1.6.5 Expectancy Violations Theory

Expectancy violations theory (Jussim et al., 1987) offers a plausible explanation as to why female leaders who engage in directive or other forms of agentic behavior do not have to be subject to backlash but might also be favorably evaluated. Similar to the RCT (Eagly & Karau, 2002), expectancy violations theory draws on perceptual biases and derives information about an individual's personal characteristics from societal stereotypes (Jussim et al., 1987). Under expectancy violations, it is suggested that when a person's behavior violates stereotype-based expectations, evaluations are rendered more extreme in the direction of the expectancy violation. In that light, individuals who display more favorable behavior than expected (e.g., females engaging in directive leadership) should subsequently be evaluated more favorably than those for

whom displaying this particular behavior is expected of them (e.g., males engaging in directive leadership). A large body of research under expectancy violations has shown how positive expectancy-disconfirming behavior attracts attention and contributes to the evaluation of individuals (e.g., Anderson, Lievens, van Dam, & Born, 2006; Avery, McKay, Wilson, & Tonidandel, 2007; Jussim et al., 1987).

Previous research on the expectancy violations theory has shown how female leaders engaging in agentic behavior benefit from a countervailing bias and are likely to emerge as leaders more so than their male counterparts, even if the latter displays the same behavior (Lanaj & Hollenbeck, 2015). In a similar vein, Post et al. (2009) showed how engaging in innovative behavior – regarded as agentic behavior – rendered females with higher evaluations of promotability than males. Similarly, research has also shown how males benefit from a countervailing bias when they deviate from their gender stereotype: For example, males were more favourably evaluated than females when they engaged in altruistic citizenship behavior – a behavior expected of females (Heilman & Chen, 2005).

Therefore, we arrive at the postulation that female leaders who engage in agentic or directive behavior aimed to benefit the followers or the group, as in laying out the directives and objectives of a task, will not be subject to backlash as is traditionally shown (Amanatullah & Morris, 2010; Amanatullah & Tinsley, 2013). Rather, they will be positively evaluated for engaging in counter-stereotypical behavior (see Lanaj & Hollenbeck, 2015). Furthermore, they will be seen as reducing the uncertainty evoked by them occupying a leadership role (see Chattopadhyay et al., 2011). As such, female leaders who engage in agentic or directive leadership behavior will be regarded by their followers as prototypical and thus effective.

In a similar vein, male leaders who engage in communal behavior or participative leadership will also not be subject to backlash but are likely to be more favorably evaluated than females who engage in equivalent behavior (Heilman & Chen, 2005). As male leaders are unlikely to evoke heightened uncertainty in their followers and because they are generally

ascribed with a leader status, engaging in directive leadership would be regarded as overly assertive (Sauer, 2011; Subašić et al., 2011). Hence, male leaders are better off engaging in a softer leadership style such as participative leadership to be considered prototypical and consequently effective.

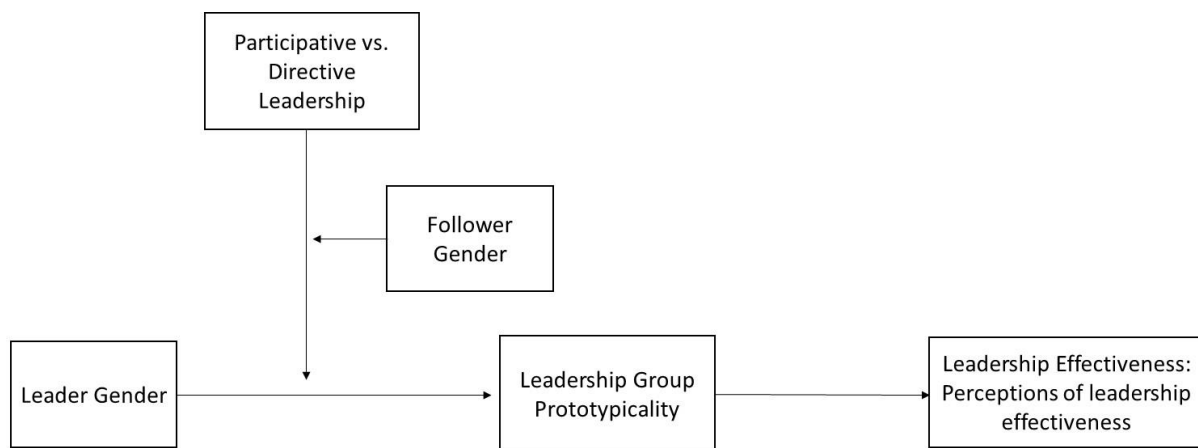
3.1.7 Overall Summary

In taking stock of the state of the science, several conclusions are relevant. Firstly, the link between leader gender and leadership effectiveness has generated mixed results which cannot be explained under the RCT (Eagly & Karau, 2002; Hogg et al., 2006; Paustian-Underdahl et al., 2014). The relational demography literature which posits that leadership effectiveness is a function of the interaction between leader gender and follower gender is also not equipped in accounting for the different findings (e.g., Epitropaki & Martin, 1999; Tsui & O'Reilly, 1989; Vecchio & Bullis, 2001). However, contemporary evidence under the expectancy violations theory (Jussim et al., 1987) shows an altering trend that empowers female leaders through engaging in agentic leadership behavior (e.g. Anderson et al., 2006; Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010). Building on those findings, I propose that the SITL is suited to better explain the effect of leader gender on leadership effectiveness through leadership group prototypicality which is contingent on leadership styles and follower gender.

3.2 CONCEPTUAL FRAMEWORK

The hypothesized conceptual framework is depicted in Figure 3.1.

In the model, the effect of leader gender on leadership effectiveness (perceptions of leadership effectiveness) is shown through leadership group prototypicality which is hypothesized as firstly a product of the interaction between leader gender and leadership styles (participative vs. directive) and secondly a product of the 3-way interaction between leader gender, leadership styles, and follower gender.



Drawing on the SITL (van Knippenberg & Hogg, 2003), I posit that for leaders of either gender to drive leadership effectiveness, they firstly have to establish themselves as prototypical leaders. Knowing that leadership group prototypicality does not have to include demographic characteristics (van Knippenberg, 2011), a main effect of leader gender on leadership group prototypicality is not hypothesized but rather the proposal is made that a leader can engage in certain behavior that would render them prototypical (e.g., Giessner & van Knippenberg, 2008; van Knippenberg & van Knippenberg, 2005). I build my arguments based on the premise that leaders can have a steady influence over the group prototype, provided they are perceived as prototypical leaders and engage in activities that advance the identity of the group (Steffens et al., 2014). I firstly present the effect on leadership group prototypicality as a result of the interaction between leader gender and leadership styles. The choice of using participative versus directive leadership stems from the fact that they capture gender stereotypical behavior with participative

falling under communal characteristics and directive under agentic characteristics (Eagly & Johnson, 1990; Ridgeway, 2004). Building on expectancy violations theory (Jussim et al., 1987), I hypothesize that female leaders who engage in directive leadership styles (a behavior counter to their gender stereotype) will be regarded as more prototypical than male leaders who engage in the same behavior. Under the same token, I propose that male leaders who engage in participative leadership will be more prototypical than their female counterparts. To further support my postulation, I ground the analysis in the uncertainty reduction hypothesis (Chattopadhyay et al., 2011; Hogg & Mullin, 1999; Reid & Hogg, 2005) and posit that female leaders – considered low status in leadership roles (Correll & Ridgeway, 2003)- are likely to induce uncertainty in their followers and would thus be better suited to engage in directive leadership behavior to attenuate uncertainty and be considered prototypical (Rast et al., 2013; Rast, 2015). On the other hand, male leaders who are typically regarded as high status and thus legitimate occupants of leadership roles will not evoke feelings of uncertainty and will be better accepted than female leaders if they engage in participative leadership (see Sauer, 2011). In addition, male leaders who are generally considered part of the ‘in-group’ in most organizational leadership roles are likely to be less tolerated when they exercise harsher power tactics, as in directive leadership, for that signals a violation of the trust relationships with followers (Subašić et al., 2011). As trust is crucial for being considered prototypical (Hogg et al., 2012), male leaders will be better accepted if they resort to participative leadership.

Secondly, I further hypothesize that the effect on leadership group prototypicality is a function of a 3-way interaction between leader gender, leadership styles, and follower gender. I base my hypothesis on the uncertainty reduction motive and postulate that the levels of uncertainty evoked by the leader are also dependent on the gender of the followers. For example, male followers reporting to a female leader are prone to heightened levels of uncertainty due to felt status differences (Balkwell & Berger, 1996; Chattopadhyay et al., 2011); this level of uncertainty will not be experienced by female followers. It then seems plausible to hypothesize

that a female engaging in directive leadership will be regarded as more prototypical than her male counterpart, particularly with male followers as opposed to female followers. On the other hand, as male leaders do not evoke increased uncertainty in their followers, and especially less so with their male followers; engaging in participative leadership would be more adaptive with their male followers as opposed to female followers.

Once leadership group prototypicality is established, and in line with other researchers (Cicero et al., 2007; Giessner & van Knippenberg, 2008; Pierro et al., 2005; van Knippenberg, 2011), it will lead to positive perceptions of leadership effectiveness.

3.2.1 Leader Gender and Leadership Group Prototypicality

The SITL does not make an explicit prediction on the effect of leader gender on leadership group prototypicality (Hogg et al., 2006; van Knippenberg, 2011). In the only study to date that looked at the effect of leader gender from a SITL perspective (cf. Wells & Aicher, 2013), the researchers found that the extent to which participants endorsed traditional gender roles impacted on whether they considered a male or a female leader prototypical. Participants with traditional gender roles regarded a male leader of ‘instrumental’ groups (male-typed norm) more prototypical than a female leader while vice versa results were found for ‘expressive’ groups (female-typed norm) (Hogg et al., 2006). Those effects were not observed for participants with less traditional gender role orientations. While these arguments can be taken to suggest that leader gender can have a direct effect on leadership group prototypicality, the rate in which individuals endorse traditional gender roles – albeit still thriving – is on the decrease, particularly among college graduates who constitute the majority of the working population in organizations (Auster & Ohm, 2000; Bryant, 2003; Iwenge, 1997).

On the other hand, as the group or organizational prototype are gendered, it is not so much that leader gender will render a leader more prototypical and ultimately more effective, but rather the behavior of the leader needs to be in congruence with the overall group prototype (Hogg et al., 2006). As organizations are characterized by leadership roles engrained in the male

prerogative, stereotypically male characteristics are more likely to be regarded as group prototypical (see Eagly & Karau, 2002; Gartzia, 2011; Koenig et al., 2011; Powell et al., 2002). As such, it is not the gender of the leader per se that drives leadership group prototypicality but, if a leader is to be considered prototypical, they have to engage in behavior that is congruent with the prototype of the group. Keeping in mind that leaders can establish leadership group prototypicality through engaging in certain behaviors (see Giessner & van Knippenberg, 2008; van Knippenberg & van Knippenberg, 2005), the role of leadership styles will be discussed next as the first contingency factor to establish leadership group prototypicality.

3.2.2 Leader Gender and Leadership group prototypicality: The Moderating Role of Leadership Style

While the SITL does not prescribe a specific leadership style that the leader has to exhibit, the theory simply postulates that followers look up to prototypical leaders and endorse them (Hogg et al., 2012). When the leader is male, he is considered high status and is readily regarded as competent, legitimate, assertive, and possessing leader-like characteristics (Correll & Ridgeway, 2003; Eagly & Karau, 2002; Ellemers, Rink, Derks, & Ryan, 2012; Heilman, 2012; Powell & Butterfield, 2015a; Ridgeway, 2004). As such, male leaders do not have to resort to a directive leadership style to appear prototypical but are more likely to be effective if they rely on their personal power and engage in participative leadership to influence their followers (Sauer, 2011). In fact, a study by Subašić et al. (2011) showed that as leaders are considered part of the ‘in-group’, and thus prototypical, they are less tolerated when they resort to harsh power tactics for that signals a violation of trust in the leader-follower relationship which is detrimental for being considered prototypical (Rast et al., 2012; van Knippenberg & Hogg, 2003; van Knippenberg, 2011).

Contrary to male leaders, female leaders do not instantly signal a stereotypically-male leadership style and will have to resort to a more ‘leadership-prototypical’ behavior – namely directive leadership style (Eagly & Johnson, 1990; Heilman, 2001; Koenig et al., 2011). While this refutes numerous empirical evidence showing that females are ‘backlashed’ when they

engage in male-like leadership behavior (agentic, directive, autocratic) (Eagly & Johnson, 1990; Eagly & Karau, 2002; Ellemers et al., 2012; Gupta, Turban, & Bhawe, 2008), more recent evidence has shown that female leaders are better rated when they engage in agentic-like behaviors such as directive leadership (see Amanatullah & Morris, 2010; Amanatullah & Tinsley, 2013; Lanaj & Hollenbeck, 2015; Reid, Palomares, Anderson, & Bondad-Brown, 2009; Rosette & Tost, 2010). Furthermore, as research has asserted that originally non-prototypical leaders need to engage in group-serving behavior to be considered prototypical (e.g., Giessner & van Knippenberg, 2008; van Knippenberg & van Knippenberg, 2005), Amanatullah and colleagues (2010, 2013) have shown that when females engage in agentic-like behavior in an advocacy context, they are not subject to ‘backlash’ but are rather positively evaluated. In a similar vein, a female leader providing a clear direction as to what is required from her followers and what goals they are expected to meet, i.e., directive behavior, would portray group/follower-serving behavior signaling that the female leader cares for the performance of her followers. This caring for the collective/other would render her prototypical of the group.

Moreover, often being considered as low status and less competent in leadership positions (Chattopadhyay, George, et al., 2004; Correll & Ridgeway, 2003; Ridgeway, 2004), females are not imbued with personal power and legitimacy and might even be unable to exercise participative leadership to have an influence on their followers (Sauer, 2011; Vial et al., 2015). In essence, female leaders might be better off to employ a directive leader style as that builds on their positional rather than their personal power (Sauer, 2011).

Drawing on expectancy violations theory (Jussim et al., 1987), it becomes clearer why female leaders engaging in directive behavior will be regarded more prototypical than their male counterparts, and vice-versa for male leaders using participative leadership. There is ample evidence in the literature to support the notion that violating one’s stereotyped-based expectations will yield more extreme evaluations in the direction of the expectancy violation (see Anderson et al., 2006; Lanaj & Hollenbeck, 2015; Post et al., 2009). For example, a recent study by Lanaj and

Hollenbeck (2015) found that females were more likely than males to emerge as leaders when they engaged in agentic behavior, even if males engaged in the same type of behavior. Under expectancy violations theory, female leaders who engage in participative leadership are not perceived as violating their gender expectations and thus do not benefit from any countervailing perceptual bias; the same applies for male leaders under directive leadership. However, when either of the genders engages in behaviors not expected of them – females in agentic behavior (Lanaj & Hollenbeck, 2015; Post et al., 2009) and males in communal behavior (Heilman & Chen, 2005), they will be more favorably evaluated. For the stated reasons, I predict that female leaders who engage in directive leadership will be regarded more prototypical than their male counterparts, while the opposite results are expected under participative leadership.

In addition, an extension to the SITL, the uncertainty reduction hypothesis (Hogg & Mullin, 1999; Reid & Hogg, 2005) postulates that people are motivated to reduce uncertainty related to their identity or the group that they identify with. Given the low status and low competence attributions imbued for female leaders (as opposed to male leaders), they are likely to provoke feelings of uncertainty in the groups that they lead (Chattopadhyay et al., 2011). Research has shown that when subject to uncertainty, a directive or even an autocratic leadership style rendered the leader more prototypical than using a non-autocratic leadership style (Rast et al., 2013).

Rendering female leaders prototypical under directive leadership and male leaders prototypical under participative leadership can be further supported by advances on the SITL (see Steffens et al., 2014). As female leaders are regarded to care for the collective and the welfare of the group when they resort to directive leadership (see Amanatullah & Morris, 2010; Amanatullah & Tinsley, 2013), they then communicate notions of identity advancement as in ‘doing it for us’. In this regard, female leaders portray that they are behaving in manners that serve the in-group’s interests rather than personal interests – a factor which increases the extent to which they are perceived to be prototypical and endorsed in their leadership positions (Duck &

Fiedling, 2003; Steffens et al., 2014; van Knippenberg & van Knippenberg, 2005). On the other hand, as male leaders are not positively regarded if they engage in harsher leadership behavior, they are more likely to be perceived not only as prototypical but also as advancing the identity of their group if they engage in participative leadership (Steffens et al., 2014; Subašić et al., 2011). In doing so, they are better regarded as caring for the collective as opposed to their personal interests.

In addition, when engaging in directive leadership, female leaders can also be seen as identity entrepreneurs as they are clear on setting the boundaries of the group and defining what the group stands for (Steffens et al., 2014). This notion of communicating a clear group structure along with defining values and norms of the group not only renders female leaders more prototypical but also serves to alleviate the uncertainty exhibited by group members (Reid & Hogg, 2005; van Knippenberg & Hogg, 2003). The situation would differ for male leaders: Being imbued with legitimacy to lead and thus less likely to induce uncertainty in their followers, male leaders do not actively need to show that they are capable of crafting a clear group structure or communicating the norms and values of the group – this is often regarded as implicit knowledge for high status groups in leadership positions (Chattopadhyay, Tluchowska, et al., 2004; Ridgeway, 2001). Rather, they are better regarded if they portray a more inclusive attitude towards the group, showcasing good relationships and trust with team members (Subašić et al., 2011). This is best communicated using a directive leadership behavior.

Finally, as female leaders use directive leadership with their followers, they are disseminating behaviors that establish structure, formalize practices, and deliver tangible outcomes all in the service of embedding a shared sense of the group (Steffens et al., 2014). This aspect of initiation structure (as in directive leadership) allows the female leader to engage in ‘identity impresarioship’ which serves to advance the identity of the group by making the group ‘matter’. Furthermore, this set of directive behavior can only serve to attenuate uncertainty exhibited by the followers, particularly instrumental uncertainty over whether the female leader is

able to attain positive outcomes for the group (Chattopadhyay et al., 2011). On the other hand, male leaders do need to exhibit directive leadership behavior to communicate their ability to drive favorable work outcomes. Being already perceived as ‘naturals’ in leadership positions, they are more able to communicate behaviors in favor of the group if they resort to softer leadership behavior as in participative leadership (Sauer, 2011). Thus, in order to establish leadership group prototypicality, female leaders will have to engage in a directive leadership style and male leaders in a participative leadership style.

Hypothesis 1a: Female leaders who engage in a directive leadership style will be perceived as more prototypical than male leaders who engage in a directive leadership style

Hypothesis 1b: Male leaders who engage in a participative leadership style will be perceived as more prototypical than female leaders who engage in a participative leadership style.

3.2.3 Interaction of Leader Gender, Leadership Style, and Follower Gender on Leadership group prototypicality

As follower gender impacts on leader endorsement (based on leader gender) (Eagly et al., 1995; Eagly & Karau, 2002; Paustian-Underdahl et al., 2014; Powell & Butterfield, 2015b), and with a lack of consideration of how follower gender impacts on leadership group prototypicality (Hogg et al., 2006), it is necessary to account for the role of follower gender. Contrary to males, females are often regarded as lower status, less legitimate, and less competent to lead (Correll & Ridgeway, 2003; Ridgeway, 2004; Vial et al., 2015), and hence are more likely to evoke feelings of uncertainty in their followers; particularly in their male followers due to status differences (Balkwell & Berger, 1996; Chattopadhyay et al., 2011; DiTomaso, Post, & Parks-Yancy, 2007). Prior to reducing uncertainty, it is essential to understand the kind of uncertainty the female leader triggers in her male followers. For starters, male followers reporting to a female leader are likely to experience norm uncertainty related to how they must behave to meet the leader’s expectations (Chattopadhyay et al., 2011). More importantly, male followers are also prone to

experiencing instrumental uncertainty derived from the low competence attributions associated with female leaders. In that regard, male followers might exhibit doubts about the leader's ability and competence to reach work outcomes (Chattopadhyay et al., 2011).

The manifestation of uncertainty of female followers reporting to female leaders will be of lesser intensity than that experienced by male followers reporting to a female leader. While female followers will not experience norm uncertainty, they will nevertheless uphold the low leadership attributions ascribed to female leaders (Chattopadhyay, George, et al., 2004; Ridgeway, 2004) and will thus be prone to experiencing instrumental uncertainty.

On the other hand, when a male occupies the leadership position, followers, regardless of their gender, are not prone to experiencing instrumental uncertainty. Prior research has asserted that male leaders are not only regarded by both male and female followers as highly competent in their roles (Chattopadhyay, George, et al., 2004; Correll & Ridgeway, 2003; Eagly et al., 1992), but also followers seek to actively want to associate with them in order to enhance their social identity and self-esteem (Ellemers, Wilke, & van Knippenberg, 1993; Tajfel & Turner, 1986).

To help reduce uncertainty, followers look to leaders whose roles implicate that they enjoy a greater deal of authority to define the group's identity (Hogg, 2001; Rast et al., 2012). It has been shown that under high levels of self-uncertainty, group members prefer directive, authoritative, and even autocratic leaders as they provide a 'single' version of identity (Hogg & Adelman, 2013; Hogg, et al., 2012; Rast et al., 2013). In fact, Rast et al., (2013) found that under increased levels of self-uncertainty, members perceived autocratic leaders as more prototypical of the group than non-autocratic leaders. It seems plausible then to suggest that leadership styles play a vital role in reducing follower uncertainty evoked by female leaders.

Hence, when under uncertainty, people yearn for some sort of behaviour from the leader that provides them with a sense of certainty and direction. Leadership styles, both directive and participative are very likely to play a role. While both leadership styles have been applied to task uncertainty with directive leadership proving more effective under heightened levels of task

uncertainty (Judge et al., 2004), only an extreme form of directive leadership, namely autocratic leadership (Bass & Bass, 2008; Yukl, 2010) has been applied to self-uncertainty.

Hypothesis 2: The relationship between leader gender and leadership group prototypicality is contingent on leadership style and follower gender

As previously argued, female leaders will be considered more prototypical than their male counterparts when they engage in directive leadership. The effect of directive leadership exercised by female leaders is accentuated for male followers more than for female followers: A male follower reporting to a female leader experiences more uncertainty relative to a female follower, namely in the form of both – norm and instrumental uncertainty - which might not be mitigated through a participative leadership style for several reasons. Firstly, because female leaders are not only considered ‘illegitimate’ in stereotypically-male leadership positions (Vial et al., 2015), but they are also considered less competent and they are not imbued with personal power per se (Correll & Ridgeway, 2003; Ridgeway, 2004). Particularly for male followers, female leaders do not represent how one ought to behave and are not perceived as possessing competence to drive work results (Eagly et al., 1992). Moreover, as males endorse stereotypical beliefs about female leaders, working for a leader that defies gender stereotypes negatively impacts on male followers (Brescoll et al., 2012). In this perspective, if male followers are to agree to subordination, it must be to a person deserving of the leadership role and thus, females are more likely to be considered prototypical if they engage in what is a prototypically-male leadership style. In a sense, they might even be unable to exercise participative leadership to have an influence (Sauer, 2011). For male followers, unlike participative leadership which signals hesitation, engaging in a directive leadership behavior is likely to be regarded as group-serving behavior whereby the female leaders seeks the welfare of the collective (Amanatullah & Morris, 2010; Amanatullah & Tinsley, 2013). Secondly, experiencing norm and instrumental uncertainty amount to a heightened degree of uncertainty. When under uncertainty, people look for the leader to prescribe group norms (Hogg et al., 2012) and in doing so, they have a preference for

autocratic leadership style because it provides them with direction and unambiguous norm on how to behave (Rast et al., 2012, 2013). And while female leaders are not readily accepted when they employ more directive behaviour because of lack of legitimation (Berger et al., 1998; Eagly & Karau, 2002; Rudman & Glick, 2001), recent evidence reveals that female leaders are considered more effective when they exercise directive leadership versus participative leadership (Amanatullah & Morris, 2010; Amanatullah & Tinsley, 2013; Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010; Sauer, 2011) because they mainly draw on the power of their positions to assert themselves.

Thus, in line with norm and instrumental uncertainty, the male follower is then likely to regard the female leader as prototypical if the latter behaves in a way that reassures the follower on not only how to behave to meet expectations but also that the leader is capable of driving work results. In doing so, the female leader asserts to the male follower that she is not only considered 'one of us' (prototypical) but that she engages in behaviour that asserts her as a prototypical leader by advancing the group's identity ('doing it for us') and making sure the group's structures, norms, and values are tailored to reach positive work outcomes ('crafting a sense of us' and 'making us matter') (Steffens et al., 2014). Through having a firm hold of the reins, a female leader communicates direction and competence to the male follower which serves to attenuate uncertainty and drive a positive group identity (Mullin & Hogg, 1999; Rast et al., 2012, 2013). Thus, with heightened levels of uncertainty, female leaders draw on the legitimacy of their positions to prescribe group norms and to assert their competence in driving work results, which paves the way for them to exercise directive leadership to be considered prototypical.

On the other hand, a female follower reporting to a female leader is prone to less feelings of uncertainty than her male counterpart. While a female follower will not experience norm uncertainty, she is likely to still experience some notions of instrumental uncertainty as often, females endorse the low status attributions ascribed to them and might, as a result, deem the female leader not prototypical in her leadership role (Correll & Ridgeway, 2003; Ridgeway,

2004). Moreover, it is also argued from the social identity perspective that because of their low status positions, females have a preference to be associated with males as that prescribes self-esteem enhancement (Chattopadhyay, George, et al., 2004; Ely, 1994). This is juxtaposed with meta-analytic evidence which attests that females do not favor males over females when it comes to the evaluation of leaders (Eagly et al., 1992). Nevertheless, and unlike her male counterpart, although the female follower might not exhibit a strong preference for a male leader and thus yearns less for an evident prototypically-male leadership style, the female leader still needs to reduce the uncertainty exhibited by her follower and in doing so, a directive leadership style would prove more efficient than a participative leadership style (Rast et al., 2012). Because of the difference in the intensity of the manifested uncertainty between the male and female follower, a directive leadership style by the female leader is hypothesized to work better for the male than for the female followers.

As male leaders are ‘naturally’ seen to be occupying organizational leadership roles (Cejka & Eagly, 1999; Koenig et al., 2011), they are more readily endorsed by their followers. As members are naturally open to the influence of male leaders, male leaders do not have to adopt strict behaviour to show that they have the interest of the group at heart but rather enjoy leeway in shaping the group prototype (Hogg et al., 2012; Steffens et al., 2014). The choice of which of the follower genders participative leadership works best for begs consideration from two main perspectives. Firstly, female followers under a male leader are prone to norm uncertainty and as people cope differently with norm and instrumental uncertainty, the choice of which leadership style works best to mitigate uncertainty is largely dependent on the gender or relative status and competence attributions of the leader (Chattopadhyay et al., 2011). In order to attenuate her uncertainty and to learn about group norms, a female follower looks up to the male leader who is seen to embody the prototypical attributes of the group (Hogg & Terry, 2000). In this regard, and because male leaders are considered high status, they are more effective when they engage in participative leadership style (Sauer, 2011). It could well be argued that the impact of

participative leadership style – particularly when leaders draw on their personal power to prescribe the norms of the group would be more effective on female followers as opposed to male followers who are not prone to feelings of uncertainty when under a male leader.

However, although they do not experience uncertainty, male followers might be more negatively affected than their female counterparts when their male leader exercises directive leadership as opposed to participative leadership: Being considered high status themselves, male followers are more keen on being associated with male leaders as that preserves and further asserts the prototype valence of their group (Chattopadhyay, George, et al., 2004; Ely, 1994). And with males embodying the prototypical attributes of an organizational leader, it becomes more crucial for the prototypical leader, i.e., the male leader, to preserve the notions of inherent trust particularly with his male followers and engages in participative leadership (Subašić et al., 2011).

Hypothesis 2a: Female leaders will be perceived to be more prototypical than male leaders when they exercise directive leadership; this effect will be further strengthened when followers are male rather than female

Hypothesis 2b: Male leaders will be perceived to be more prototypical than female leaders when they exercise participative leadership; this effect will be further strengthened when followers are male rather than female

3.2.4 Leadership group prototypicality as a Mediator of the Interactive Effects of Leader Gender, Leadership Style, and (Follower Gender) on Leadership Effectiveness

Based on the SITL, I suggest that leadership group prototypicality will mediate the interactive effects of leader gender and leadership effectiveness. Once the leader is considered prototypical, they are likely to influence followers to reach prescribed work outcomes. The SITL postulates that leadership group prototypicality is the primary reason that underlies why leaders are effective (Hogg et al., 2012; van Knippenberg, 2011) and leadership group prototypicality has shown positive effects on follower and organizational performance, creativity, and organizational

citizenship behavior (Giessner & van Knippenberg, 2008; Hirst et al., 2009; Pierro et al., 2005; van Knippenberg & van Knippenberg, 2005).

Female leaders will be regarded more prototypical than male leaders when they exercise directive leadership and male leaders will be considered more prototypical than their female counterparts when they engage in participative leadership. Integrating the role of follower gender, I posit that female leaders exercising directive leadership with male followers will be regarded more prototypical than female leaders exercising directive leadership with female followers. In addition, male leaders engaging in participative leadership with male followers will be perceived as more prototypical than male leaders with female followers. These influences on leadership group prototypicality affect measures of leadership effectiveness such as when the leader is considered prototypical, they are able to exhibit leadership effectiveness (Hogg et al., 2012). The result is a relationship between leader gender and leadership effectiveness, firstly moderated by leadership style and secondly by leadership style and follower gender, and mediated by leader prototypicality.

Leader gender has a positive effect on leadership effectiveness when the leader is female compared to male and exercises directive leadership through a positive effect on leader prototypicality and a positive effect of leader prototypicality on leadership effectiveness. When the leader is female and exercises directive leadership, she not only benefits from a countervailing bias as she engages in a prototypically-male leadership style that signals a willingness to take charge of the position and to drive work results (Jussim et al., 1987; Lanaj & Hollenbeck, 2015; Sauer, 2011) but also contributes to mitigating the uncertainty provoked due of the gender of the leader (Chattopadhyay et al., 2011; Hogg, 2011). In times of uncertainty, followers are likely to endorse leaders who prescribe strict guidelines about what the group stands for and what is required from them (Rast et al., 2012, 2013). When a female leader exercises directive leadership, she is likely to be considered prototypical which will eventually lead to positive work outcomes. However, if a male leader engages in directive leadership, he will be perceived as unnecessarily

relying on the power of his position (Sauer, 2011) and such ‘typical’ behaviour will not earn him credit over female leaders (Jussim et al., 1987). In addition, followers are likely to negatively interpret such behavior as in being overly assertive and lacking in competence and trust (Hogg et al., 2012; Subašić et al., 2011). This will negatively impact on leader prototypicality and will thus negatively affect leadership effectiveness.

Based on the role of follower gender, the hypothesized effect is further strengthened for male followers rather than for female followers. As male followers are prone to more heightened uncertainty than female followers and are known to uphold more gender stereotypic characteristics that hinder female leaders from being considered prototypical (Eagly et al., 1995, 1992; Hogg & Terry, 2000; Koenig et al., 2011), the effect of directive leadership is estimated to be more pronounced for them. Particularly for male followers who have ‘more to lose’ if a female is in a leadership role (Brescoll et al., 2012), when the leader is female and exercises directive leadership, this projects a prototypically-male leadership style that signals a willingness to take charge of the position and to drive work results (Sauer, 2011). Furthermore, this behavior also presents a violation of what is expected of female leaders that serves to their benefit more than a male leader who engages in the same behavior (Jussim et al., 1987; Lanaj & Hollenbeck, 2015), particularly among male followers. However, if a male leader engages in directive leadership, he will be perceived by both follower genders as unnecessarily relying on the power of his position (Sauer, 2011). In that case, followers are likely to negatively interpret such behavior as in being overly assertive and lacking in competence and trust (Hogg et al., 2012; Subašić et al., 2011). When compared to a female leader, a male leader is likely to receive less favorable evaluations on leadership group prototypicality and ultimately on leadership effectiveness.

Hypothesis 3a: Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is female compared to male and engages in directive leadership;

Hypothesis 4a: this effect will be further strengthened for male rather than female followers

Leader gender has a positive effect on leadership effectiveness when the leader is male and exercises participative leadership through a positive effect on leader prototypicality and a positive effect of leader prototypicality on leadership effectiveness. When the leader is male and exercises participative leadership, he not only projects a sense of security and competence (Ridgeway, 2004) but also benefits from more favourable evaluations for engaging in counter-stereotypical behaviour (Heilman & Chen, 2005; Jussim et al., 1987) that makes the follower perceive him as being more prototypical. The more the leader is considered prototypical the more likely he will be effective as previously shown (Giessner & van Knippenberg, 2008; Hirst et al., 2009; Pierro et al., 2005; van Knippenberg & van Knippenberg, 2005). The relationship is different for female leaders; when a female leader engages in participative leadership and adopts a consultative approach, she might be further viewed as lacking in competence and not providing the guidelines required for the group (Ridgeway, 2004; Sauer, 2011). As a result, followers are less likely to consider such a leader prototypical which will lead to negative measures of leadership effectiveness.

The proposed effect is further strengthened for male than for female followers. While the hypothesized result is predicted to be positive for both follower genders, the effect on leadership group prototypicality will be stronger for male followers who are likely to identify more strongly with the male leader (Chattopadhyay, George, et al., 2004; Ely, 1994; Tajfel & Turner, 1986). When the male leader exercises participative leadership, he not only projects a sense of security and competence (Ridgeway, 2004) but also preserves good relationships with his followers (Subašić et al., 2011). In addition, as males are more likely to hold stereotypical views on leadership (Eagly et al., 1995, 1992), the male leader is likely to benefit from engaging in counter-stereotypical behavior more from his male followers as opposed to his female followers for that signals an even more salient deviation from what would be expected of him (Jussim et al.,

1987) The more the leader is considered prototypical the more likely he will be effective as previously shown (Giessner & van Knippenberg, 2008; Hirst et al., 2009; Pierro et al., 2005; van Knippenberg & van Knippenberg, 2005). The relationship is again different for female leaders; a female leader engaging in participative leadership and adopting a consultative approach might be further viewed by both follower genders as lacking in competence and not providing the norms required for the group (Chattopadhyay, George, et al., 2004; Ridgeway, 2004; Sauer, 2011). She would also not benefit from perceptual bias as she engages in a behavior typically expected of her (Jussim et al., 1987). As a result, when compared to a male leader, followers are less likely to consider a female leader using participative leadership prototypical which will lead to less favorable effects on leadership effectiveness.

Hypothesis 3b: Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is male compared to female and engages in participative leadership;

Hypothesis 4b: this effect will be further strengthened for male rather than female followers

This concludes the presentation of the theoretical model underpinning this research and leading to the hypotheses to be tested. The following chapter presents the general methodology used to perform this research including the philosophical underpinning, the data collection and analysis technique, as well as ethical considerations and data protection.

CHAPTER 4: GENERAL METHODOLOGY

CHAPTER SUMMARY

In this chapter, I provide an overview of the paradigms governing research in the behavioural sciences. In particular, I argue for a neo-positivist/critical realist approach as being the leading orientation in leadership research and subsequently in this thesis. Stemming from this approach, I discuss, based on methodological fit, the choice of using quantitative methods to conduct the three studies. A description of sampling techniques and data analytics then follows and the chapter concludes with ethical considerations and data protection steps that were adopted in the course of this research.

4.1 RESEARCH PHILOSOPHY

4.1.1 Overview

The choice of which methodology one chooses to conduct their research, be it case studies and interviews or laboratory and field experiments, stems from the researcher's paradigm and philosophical stance on the *nature of reality* (Lee & Lings, 2008). Specifically, the choice primarily hinges on the researcher's perception of 'reality/phenomenon' – on their set of beliefs of whether an objective reality exists beyond their own perceptions or it is constructed based on their experience of it (ontology), what can be known about the phenomenon in question and whether generated knowledge can be unbiased and generalizable or is specific and particular (epistemology), and finally, what aims are targeted in the research endeavour, whether it is a matter of prediction and explanation of reality or exploring and understanding particular phenomena (axiology) (Lee & Lings, 2008; Tuli, 2010). In that light, it becomes important to firstly compare the different ontological paradigms used to generate knowledge and subsequently consider epistemological and axiological considerations in research to finally pin down the methodological approach that is most suited to address the research questions being asked in this research project.

Starting at the level of ontology, two broad and contrasting positions can be distinguished, namely objectivism which assumes that social reality and its phenomena exist independently of their social actors while constructionism holds that social phenomena and categories are a function of inherent social processes that are not only produced via social interaction but are rather in a continuous state of revision (Bryman, 2012; Lee & Lings, 2008; Neuman, 2003). For example, formal group norms would be regarded by objectivists as existing independently of whether group members abide by them or not. Although objectivists acknowledge that the norms are written by group members, they would hold the view that the group factually has norms to abide by. On the other hand, constructivists would interpret the norms of the group differently, mainly as a function of each members' attitudes, values, and motivation. To constructivists, the group norms are constantly being revised and reproduced by group members and the norms do not exist apart of the group.

Stemming from the overarching philosophical stance of the nature of reality is epistemology which is concerned with what we can know about reality and whether generated data is generalizable or fixed to a specific time and place (Lee & Lings, 2008). Three main schools of thoughts emerge under epistemology, namely positivism and realism which are concerned with an objectivist ontology and interpretivism which follows a subjectivist ontological stance (Bryman, 2012). Regarding the social sciences as largely similar to the natural sciences, researchers who adopt the positivist approach are concerned with discovering laws governing the human behaviour (Krauss & Putra, 2005; Neuman, 2003). Two main assertions are evident under positivism – namely that things exist provided they are directly observable and any proposition which cannot be 'verified', i.e., subjected to an empirical test, is impossible (Lee & Lings, 2008). Additionally, positivism contends that researchers do not have an influence on the research process but rather they separate themselves from the phenomena under study and regard data as value-free where researchers view the world through a 'one-way mirror' (Healy & Perry, 2000). Applying a positivist approach to the earlier example, a positivist researcher would then

assert that group norms exist above and beyond what group members perceive the norms to be and that the same norms would be generated for different groups and in different contexts.

The realist paradigm shares the positivist belief in an objective world which can be observed and measured (Lee & Lings, 2008). However, realist philosophy acknowledges the independent existence of things that are beyond the researcher's ability to directly confirm their existence; moreover, realism accepts the fact that observing the objective world is also prone to errors (Lee & Lings, 2008). Two main schools of thought dominate the realist paradigm, that of naïve or direct realism and critical realism. Naïve realism, a conflated form of direct realism, postulates that one's senses permit them to perceive the world directly, as it is, and without intervening processes (Nuttal, 2002). As such, naïve realists believe that reality can be readily accessed through the senses and deny that things are subject to change, rather, things always appear as they are (Le Morvan, 2004). Thus, observing group members abide by the group norms directly shows the effect of group norms on members' commitment, for example.

Critical realism, on the other hand, differs from naïve or direct realism in several aspects. For one, critical realism holds that mediating processes intervene in how one observes objects; thus, one does not see things as they really are but rather their representations in one's sensory experiences which are in turn prone to be fallible (Krauss & Putra, 2005). Although still holding the belief of a single version of reality, critical realism postulates that multiple perceptions of the mind-independent reality exists (Healy & Perry, 2000). Therefore, critical realism is more value cognizant – while 'reality' is unchanging, one's observations of it are prone to change (Krauss & Putra, 2005). In that sense, the researcher is considered an active part of the research process where their understanding of the social processes and structures affects how they perceive reality (Lee & Lings, 2008). Going back to the earlier example, abiding by group norms would be perceived by the observer in the wider context and possibly looking at intervening variables that might affect why group members would follow group norms such as looking at the power structures or leadership dynamics.

The third epistemological school of thought is interpretivism which stands in stark contrast to both positivism and realism in considering the presence of ‘multiple’ realities and thus, in emphasizing the active role that the researcher/observer plays and the impact that they have on the knowledge generation process in terms of seeing the world as constructed and interpreted by social interactions and wider social systems (Bryman, 2012). Under interpretivism, the investigator is considered to be value-laden and they, along with the subject being investigated, are believed to co-create the knowledge during inquiry; the generated knowledge is thus limited to the time and place where/when it was investigated (Krauss & Putra, 2005). To apply an interpretivist approach to the earlier example, investigators would thus be interested in understanding what each group member understands by group norms, how they perceive them to be and why they would abide (or not) by them.

After discussing ontology and epistemology, an explanation of axiology, which is concerned with the overall aims of the research as in predicting or understanding the phenomena under question, becomes relevant (Lee & Lings, 2008). A positivist or realist dimension would seek to generate predictions or hypotheses regarding the causal impact of phenomena on each other and to generalize this impact over situations. In order to do so, researchers in this realm would follow the hypothetico-deductive method whereby they would generate a series of predictions, or hypotheses, based on the previous literature and developments in the field, operationalize the constructs under question, and collect data from a large sample group that is as representative of the general population as possible (Lee & Lings, 2008). In the hypothetico-deductive method, the type of collected data is quantitative with a predominant use of validated scales that lend themselves to statistical inferences, but it can also include interviews and/or observations that are designed to be systematically quantified (Edmondson & Mcmanus, 2007). Nevertheless, the use of qualitative methods could still be utilized in the hypothetic-deductive method as in the exploratory phase of a scale, for example (Holden & Lynch, 2004).

On the other hand, the aim of interpretivists is not to predict and explain phenomena but rather, viewing things in a state of constant flux, they aim to explore and understand a phenomenon and are not concerned with generalizing their observations beyond the historical context in which a phenomenon is observed (Lee & Lings, 2008). To do so, interpretivists rely on the inductive approach which is concerned with generating theory from data and, because they do not theorize about the social world which avails room to collect quantifiable data, the inductive approach is consistent with qualitative methods which do not require theory to guide it (Lee & Lings, 2008). Examples of qualitative methods encompass interviews, observations, and focus groups, which are open-ended and require interpretation for meaning (Edmondson & Mcmanus, 2007). Because findings from interpretivistic paradigm are not generalizable, smaller data sets than the ones targeted in the positivist/realist paradigm are sought (Holden & Lynch, 2004).

After discussing ontology, epistemology, and axiology for the social sciences in general, the following section will look at those elements in research on leadership and subsequently, the choice of the philosophy guiding this thesis will be presented.

4.1.2 Research Philosophy in Leadership Research

The field of leadership research has been extensively studied under the objectivist paradigm where studies have been grounded in the neo-positivist/realist realm which entailed rigorous hypothesis testing through the collection of large data sets and subjecting those to statistical analyses (Alvesson, 1996; Bryman, 2004; Insch, Moore, & Murphy, 1997). Specifically, research in leadership is grounded in critical realism as researchers have endeavoured to study theory-laden constructs that are not directly observable, such as motivation and perceptions, but that, nonetheless, can be measured and studied under the light of theoretical explanations (Lee & Lings, 2008). While the purely positivist approach regards the researcher as a “passive receptor of data” (Lee & Lings, 2008, p: 30), leadership researchers are considered critical realists for their engagement with the observations through the use of concepts and measurements.

Few studies in leadership research followed the interpretivist approach with the main aim of exploring measures or generating context-specific findings (for a review, see Bryman, 2004), and even fewer ones looked at gender and leadership (Statham, 1987; Upenieks, 2002), and the impact of different leadership styles on measures of leadership effectiveness (Bryman, Bresnen, Beardsworth, & Keil, 1988; Bryman, Gillingwater, & McGuinness, 1996; Coleman, 1996; Gaines, 1993; Greene, Black, & Ackers, 2000). For example, approximately 88% of the studies published in *The Leadership Quarterly* up to the year 2009 used quantitative methodology whereas 12% utilised qualitative methods (Gardner, Lowe, Moss, Mahoney, & Coglisier, 2010). Furthermore, the SITL has not been studied under the interpretivist paradigm. On the other hand, the overarching studies in leadership were conducted with the aim of generating external validity (Cook & Campbell, 1976) and thus generalizing the findings to multiple contexts and situations. In that, studies were based on developed theory and were driven through hypothesis testing where large samples were targeted using surveys completed by both leaders and followers. Studies in the leadership realm looked at the relationship between different leadership behavior and/or attributes and the influence of that on different measures of leadership effectiveness. For example, research on gender and leadership has been studied at the individual (e.g., Douglas, 2012; Tsui & O'Reilly, 1989) and the group level (e.g., Nishii & Mayer, 2009) and researched in different countries such as China (e.g., Loi & Ngo, 2009), Nigeria (e.g., Adebayo & Udegbe, 2004), the United States of America (e.g., Tsui et al., 2002), and across different industries like education (e.g., Mai-Dalton & Sullivan, 1981; Somech, 2003), the military (Vecchio & Brazil, 2007), general service organizations (e.g., Schaffer & Riordan, 2013; Wesolowski, 1997), and Fortune 500 companies (e.g., Tsui & O'Reilly, 1989). Likewise, research on the SITL has also been extensively studied in different countries such as in Italy and the Netherlands and across several industries (for a review, see Hogg et al., 2012). To establish internal validity and causal patterns, studies are complemented by experimental designs that eliminate the impact of potential confounding variables on results (Scandura & Williams, 2000; Shadish et al., 2002). Several

experiments under the SITL have been conducted (e.g., Hogg et al., 2006; Rast et al., 2012; van Knippenberg & van Knippenberg, 2005) as well as under the gender and leadership realm (e.g., Brescoll et al., 2012; Ryan et al., 2011).

To sum the state of the art in leadership research, it is evident that fewer studies used qualitative research methods with the aim of gaining an in-depth understanding of context-specific phenomena through the use of interviews, case studies, and focus groups (Alvesson, 1996; Bryman, 2004) and even less qualitative methods were employed to explore gender and leadership. On the other hand, quantitative approaches through the use of large scale surveys, following the hypothetico deductive method were the predominant means of understanding the impact of leadership, including gender and leadership.

4.1.3 Research Philosophy in this Thesis

The focus of research in this thesis will emanate from an objectivist ontology and a neo-positivist or realist epistemology whereby it is believed that an objective reality exists that is yet to be discovered and that unobservable constructs such as perceptions of leadership effectiveness can be meaningfully captured via measurements and scales (Lee & Lings, 2008). With that said, this thesis will seek to generate theory-laden hypotheses with the aim of explaining and predicting generalizable knowledge, rather than merely understanding context-specific observations, of the relationship between leader gender and measures of leadership effectiveness (Krauss & Putra, 2005; Lee & Lings, 2008). With an objectivist ontology, a realist epistemology, and with research aims of predicting and explaining relationships, this thesis will make use of quantitative methodologies throughout its studies.

The choice of quantitative methodology also arises as a function of the state of the art of leadership research per se, and gender and leadership in particular. For starters, leadership research is not considered in its nascent stage where tentative answers to theoretical questions are provided; rather leadership research is considered to be in its mature stage where well-developed

models and constructs have been extensively studied and broad points of agreement established (Avolio et al., 2003; Bryman, 2004; Edmondson & Mcmanus, 2007). In that light, research on gender and leadership with its highly inconclusive results stimulates studies that leads to refinement of the existing knowledge while focusing on testable hypotheses that builds on prior work, proposes new mediating mechanisms, and examines different boundary conditions which is the focus of this thesis (Edmondson & Mcmanus, 2007). Characteristic of mature research, this hypothesis-testing approach examines the association between developed constructs, namely gender, leadership styles, and measures of leadership effectiveness, through conducting experimental and field study research that are best conducive to fulfill those objectives (Scandura & Williams, 2000; Shadish et al., 2002). Therefore, in the current research where the field is mature and with valid and reliable measurements of constructs, the use of quantitative methods is warranted (Edmondson & Mcmanus, 2007).

4.1.4 Research Designs in this Thesis

To test the proposed conceptual framework, a quantitative approach is adopted. Three empirical testing for the model will be conducted to triangulate the findings (Scandura & Williams, 2000). In order to understand the direction and nature of causal relationship between leader gender and leadership effectiveness, an experimental research design will be implemented for Study 1 and Study 2 (Scandura & Williams, 2000; Shadish et al., 2002). Essentially, an experiment is designed where a cause is manipulated and its effect on an outcome is observed, the effect of the variation of the cause on the effect is checked, and a reduction of the plausibility of other explanations is implemented (Shadish et al., 2002). A classic experiment is set in a ‘controlled’ setting and entails the random allocation of participants over at least two groups, be it a control and treatment group or two treatment groups, where the variable of interest is manipulated and the responses of each of the groups on the dependent variable is recorded and then compared (Lee & Lings, 2008). By following these steps, researchers assert that the influence on the dependent variable is not a result of an external stimulus but rather is a causal

impact of the variation of the independent variable on the dependent variable (Shadish et al., 2002). However, it should be noted that, although experimental designs are characterized by high internal validity, one of their main drawbacks is that they sacrifice external validity and generalizability of the findings in order to enhance internal validity (Cook & Campbell, 1976; Scandura & Williams, 2000). Therefore, a test of external validity will then be carried out through conducting a field study (Study 3) (Maner, 2016).

The classical experimental approach was followed for Study 1 and 2. In an attempt to simultaneously enhance external validity and maintain high internal validity, experimental vignette methodology (EVM) which enhances experimental realism by presenting participants with carefully constructed scenarios while still allowing researchers to manipulate independent variables was adopted for Study 1 and 2 (Aguinis & Bradley, 2014; Atzmuller & Steiner, 2010). One of the additional benefits of using EVMs is that they are not restricted to paper scenarios but can also include videos, images and other media, all in an attempt to increase experimental realism and participant immersion in the situation (Aguinis & Bradley, 2014; Hughes & Huby, 2002).

For Study 1, video vignettes to manipulate the effect of leader gender, leadership styles (participative vs. directive), and follower gender on measures of leadership effectiveness were used (scenario available in Appendix 1). In that light, and after participants were split by gender, they were randomly allocated to one of eight experimental groups (female leader, participative leadership, female follower; female leader, directive leadership, female followers; female leader, participative leadership, male follower; female leader, directive leadership, male follower; male leader, participative leadership, male follower; male leader, directive leadership, male follower; male leader, participative leadership, female follower; and male leader directive leadership, female follower). Responses on the variables of interest through the use of surveys and objective task response were then collected.

In order to have corroborating evidence on the results of Study 1, and because potentially no research study is without its inherent flaws (McGrath, 1982), it becomes essential to replicate the results of the first experiment through using a different experimental method – a process termed as triangulation (Scandura & Williams, 2000). Triangulation can be on different aspects of the research study, including strategies (for example, administering a paper vignette versus a video vignette), settings for data collection (for example, field setting to increase external validity versus an experiment for internal validity), and sources of data (for example, leader-rated measures of employee performance) (Scandura & Williams, 2000). As the aim is to provide further support for the conceptual model prior to testing it in a field setting, Study 2 was constructed with the aim of triangulating at the research strategy level. Using the same content of EVMs as in Study 1, Study 2 was ran in a paper format. Following similar steps as in Study 1, participants were randomly allocated to one of eight experimental groups and asked to read a paper vignette (Appendix 2). To obtain measures on the dependent variables, surveys are used. As a result, the design of Study 2 allows us to validate the causal links in Study 1 and to assess whether the strategy of administration plays a role in influencing the results.

Although Study 1 and Study 2 use EVMs in an attempt to compensate for the low external validity inherent in experimental designs, they certainly do not override the necessity to conduct research in a field study to establish external validity (Aguinis & Bradley, 2014).. In a means to address those main weaknesses and hence generate both internal and external validity, Study 3 was conducted as a sample survey field study (Scandura & Williams, 2000). Surveys avail the opportunity to collect a large amount of data from a representative sample of the general population within a limited timeframe; such data collection means are not possible using other methodologies. In order to ensure that the collected data is robust and that meaningful results and associations can be obtained and interpreted between our independent and dependent variables, valid, reliable, and standardized measures of all study variables are used (Lee & Lings, 2008).. In sum, the use of survey methods enables one to observe natural variations in interaction between

leader gender, leadership styles, and follower gender on measures of leadership effectiveness. In doing so, the external validity of the research model is maximized.

Due to high sample attrition rates associated with longitudinal studies (Lee & Lings, 2008) and time-constraints on securing the appropriate sample size for the data analysis technique (Shieh, 2009), a cross-sectional design was chosen and thus one survey to followers was distributed. Although the nature of Study 3 does not allow for causal inferences and the direction of the observed relationships to be inferred (Bryman & Bell, 2015), it allows for inferences about the temporal order of variables – it is more plausible that effects on measures of leadership effectiveness are a function of leader gender and not the other way around (Lee & Lings, 2008). Moreover, it should well be noted that Study 1 and Study 2 are targeted to portray causality between leader gender, leadership group prototypicality, and leadership effectiveness.

Moreover, the use of self-report surveys in all the studies poses a potential challenge, namely systematic measurement error which allows for alternative explanations, be it inflated or deflated relationships, among the constructs assessed in a study (Podsakoff et al., 2003). One of the major sources of systematic measurement error is common method variance which entails “variance that is attributable to the measurement method rather than the constructs the measures represent” (Bagozzi, Yi, & Phillips, 1991: 421). Several sources of common method variance have been discussed in the behavioral sciences and have generally been grouped under four main categories: common rater effects which relates to the attributed variance between the independent and the dependent variable when the same rater provides answers on all study variables; item characteristic effect which concerns variance attributed to how respondents interpret an item; item context effects which relates to artefactual variance relating to how respondents ascribe meaning to items based on their relation to other items in a scale; and measurement context effects which refer to covariation produced from the context in which data was collected (Podsakoff et al., 2003). Relating to the common rater effect and of relevance to the studies in this thesis are consistency motif, social desirability, and transient mood states. Firstly,

consistency motif is the tendency of respondents to answer scales in a consistent manner; this is particularly pronounced when respondents are asked to array their judgements on prominent theories as is evident in our studies (Podsakoff & Organ, 1986). Secondly, social desirability, which relates to the inclination of respondents to present themselves under favorable light, poses another substantial challenge to our self-report measures (Podsakoff & Organ, 1986). Finally, transient mood states which reflect respondents' positive and negative affectivity might also produce artefactual covariance because the respondent answers the self-report measure while in a certain mood (Podsakoff et al., 2003). All of the discussed method variances have potential to skew the results either in a positive or negative manner.

To combat for the challenges posed by common method variance, steps were taken to reduce the negative influence these processes might induce on the results. For one, it is well worth noting that the independent variable (leader gender) and one of the moderators (follower gender) are demographic variables which inherently reduce the presence and impact of the discussed method biases (Podsakoff & Organ, 1986). In addition, clear instructions are in place to ensure that participants fully understand the anonymous nature of their responses which contributes to reducing their apprehension on answering the survey in an honest manner (Podsakoff et al., 2003). Moreover, the proximity of our continuous moderator (leadership styles) from our mediating and outcome variables was reduced to decrease the likelihood that respondents will link the order of the variables in a logical flow.

In sum, the aim in this thesis is to generate generalizable knowledge on how and when female leaders are considered effective in their organizational leadership roles. To do so, a critical realist perspective was adopted that will utilize experimental and field studies to achieve internal and external validity to the proposed conceptual model. In the following section of the chapter, data collection and analysis will be discussed.

4.2 DATA COLLECTION AND ANALYSIS

4.2.1 Sampling Method

In line with the critical realist paradigm adopted in this thesis, the aim is to generate generalizable knowledge that informs how and when female leaders are considered effective in their leadership roles. To do so, a representative sample of the population needs to be drawn.

Two types of quantitative sampling methods are discussed in the literature – probability sampling and non-probability sampling. Probability sampling, lauded to be the ‘ideal’ sampling method, stipulates that a random selection of the population to which the results will be generalized to be drawn (Bryman, 2012; Lee & Lings, 2008). This basically entails that a perfect list of the population of interest is present and a perfect random sample is drawn. However, in practice, probability sampling is considered an unrealistic ideal that is, more often than not, much harder to achieve for several reasons (Lee & Lings, 2008). Firstly, there is hardly ever a compiled perfect list of the population of interest; secondly, probability sampling wrongly assumes that the randomly selected participants would take part in management research; and thirdly, if such a perfect list exists for a targeted population, then the generalizable results are limited in scope (Lee & Lings, 2008).

On the other hand, non-probability sampling - the more common means of sampling in organizational research projects, is based on convenience samples which are a product of ease of access (Bryman, 2012; Lee & Lings, 2008). While there are inherent advantages in non-probability sampling, the main challenge in this technique is the generalizability of the findings. In order to judge whether a convenience sample would be appropriate to use in a research project, it is important to consider different objectives of generalizing obtained results. Two types of generalizations can be distinguished to stem from two broad research questions: applied research questions that aim at *effects generalization* and theoretical research questions that are concerned with *theory generalization* (Calder et al., 1982; Kruglanski & Kroy, 1976). While in *effects generalization* the researcher is interested in applying the finding to the population of interest and

here a random sample is recommended, in *theory generalizing*, the researcher is more concerned with generating an understanding of the ‘real’ world based on theoretical frameworks. In fact, random samples are not recommended for theoretical research questions (see Calder et al., 1982).

As the research question in this thesis is grounded in a theoretical framework (SITL) that seeks to understand how and under what conditions female leaders would be considered prototypical members by their followers which in turn paves way for leadership effectiveness, a higher concern arises with *theory generalization* as opposed to *effects generalization*. With that in place, the use of a convenience sample is justified. Nevertheless, this does not indicate that any sample of participants would be conducive to test the conceptual model. Two key criteria need to be considered prior to drawing on a convenience sample to test a theoretical research question. Firstly, it is fundamental to consider whether the drawn sample provides meaningful data in order to test the theory (Lee & Lings, 2008). For example, a sample consisting of self-employed personnel would not be appropriate to collect data from on how they perceive their female leader because such dynamics are non-existent. However, a sample of employees working in a defined hierarchical structure would be more useful for this research. In addition, a sample of students in a controlled setting such as an experiment where hierarchical structures can be manipulated as in inviting participants to consider themselves as employees and having them interact with a fictional leader would also be possible and allow for theory generalization. Secondly, it is important to determine whether the selected sample is systematically different from the general population it is drawn from (Lee & Lings, 2008). For example, if the sample consists of only fresh university graduates whereas the population includes an equal distribution of early, mid, and senior career-level individuals, then the fresh graduate sample is likely to bias the conclusions and significantly reduces generalizability.

4.2.2 Participants

A non-probability convenience sampling technique was used to obtain access to all three studies. The samples for both Study 1 and Study 2 (experimental studies) consisted of

undergraduate and postgraduate students in a leading business school in the UK. Both studies had a 2 (leader gender) x2 (leadership styles: directive vs. participative) x2 (follower gender) between subject design and thus necessitated that a minimum of 7 participants take place in each cell resulting in a required sample size of at least 56 participants (van Voorhis & Morgan, 2007). Starting with Study 1, students were approached in their summer workshops and asked to take part in a research study. Research administrators approached 12 workshop sessions consisting on average of 25 participants each and asked to take part. A total of 151 participants (93% postgraduates; 51.3% female) partook in Study 1. In study 2, a sample consisting of 171 participants (61% undergraduate; 51.8% female) took part in the research. To obtain the sample for this study, research administrators approached 4 tutorial sessions consisting of 30 students each and 2 workshop sessions comprising of 37 students each and asked them to partake in this research project. Both of the experimental samples are conducive to generate *theory generalizations* on the underlying framework guiding the effectiveness of female leaders (see Calder et al., 1982).

It was more challenging to obtain a field sample for Study 3. In total, 165 organizations of different industries and sectors and based in different countries (UK, Lebanon, and Germany) were contacted of which 10 (9 in Lebanon and 1 in Germany) agreed to participate. From the participating organizations, usable data from 126 employees. The obtained sample size exhibited satisfactory power and met the minimum requirement for the analyses to be conducted (10-20 per variable and our model includes 5 variable resulting in a minimum of 50 participants) (van Voorhis & Morgan, 2007). As the field study sample is diverse and did not exhibit anomalies pertaining to demographic characteristics, it is justified to utilize the results of this study for theoretical generalizations as well as effects generalizations on a population of organizational members.

4.2.3 Data Analysis Technique

Because the conceptual model is at the individual-level of analysis, there is little estimate of within-group variability and thus the observations are regarded as independent and measured at their designated level (Field, 2009). For the experimental studies, an analysis of covariance (ANCOVA) was conducted for the moderation hypotheses. For the field study, a series of hierarchical linear regressions were run and recommendations from Dawson (2014) were implemented to test for the 2-way and the 3-way interactions. Moreover, moderated mediation analyses were conducted in PROCESS while following the steps laid out by Hayes (2015) and Preacher, Rucker, and Hayes (2007). The choice of running the model in PROCESS and not in an SEM software lies in the fact that the latter is used to model several dependent variables simultaneously (Wang & Wang, 2012) which is not central to our research project.

4.3 ETHICAL CONSIDERATIONS AND DATA PROTECTION

4.3.1 General Procedure

Data collection in all three studies abided by the APA ethical principles of psychologists and code of conduct (American Psychological Association, 2010) and received ethical approval from the Research Ethics Committee at Aston Business School (reference number: 38:10/14). Participants across the different studies were informed that their participation is voluntary and that they can withdraw at any stage without inducing any impact on their studies/employment. Prior to taking part in the study, participants were presented with an information sheet (paper format Studies 1 and 2 and online format for Study 3) containing details about the study aim, background, procedure, use of data, and personal and research-related benefits. Participants were then subsequently asked to complete an informed consent form if they wish to partake in the study. For participants in Study 1, prospective personal benefits for participating in the study were highlighted whereby respondents were offered feedback on some of the study scales relating to their leadership styles and individual differences. Participants were informed that they could potentially use the given feedback as part of a reflective assignment they were asked to do in their

personal development program at the business school. On the other hand, participants in Study 2 and Study 3 were not offered compensation for their participation. In all three studies, there was no use of deception. To further reduce malfeasance and ensure beneficence, participants were informed that access to their pool was coordinated by the Human Resources manager/CEO/relevant academics and that the survey measures constituted of reliable and valid measures.

Respondents in all three studies were asked to complete a survey. A paper format survey (Appendix 3) was used in the first two experimental studies and an online version (Appendix 4) was utilized for the field study. In order to secure the anonymity of the data, no personal details about any respondent were collected including but not limited to exact date of birth, department, and names. In this manner, it was ensured that all collected information could not be traced back to a single respondent. In order to match participant ratings in studies 1 and 2 to task performance, respondents were to create unique codes that consisted of a combination of their parents' names and the month in which they were born and to display the code on both the survey and the task sheets. To me, the codes do not represent any meaningful information other than the ability to match the respective material. Finally, in line with the Research Council's UK (2009) code of conduct, data will be kept up to ten years and will later be destroyed.

After data analysis, all participating organizations received a report sent to their Human Resources manager/CEO that consisted of the study results presented in a manner conducive for a practitioner audience. In this regard, no technical jargon, theoretical terms, and complex models were presented. The report entailed recommended steps on how to leverage the impact of their leaders, particularly their female leaders, to drive leadership effectiveness.

4.3.2 Risk of Coercion Through Gatekeepers

As informed consent was sought prior to the studies, all participants were made aware that their participation is voluntary and that they have the right to withdraw from the study at any

point. However, because access to the participant pool was gained through gatekeepers, potential concerns in coercion might have risen had implemented several steps not been implemented to counter them (Homan, 2001). In studies 1 and 2, lecturers and workshop facilitators provided access to their classes where students were approached to take part. Nevertheless, it was made clear by the research administrators and the relevant academic faculty that participation in the studies do not have any impact on students' evaluation in the course/workshops. The studies were formulated as extra activities that students may wish to take part in and thus no coercion was in play. In that, students were given the full responsibility whether they opt to participate and there was no record of who took part and who did not. Students were thus made aware that neither their lecturers nor workshop facilitators would receive information about their participation. For Study 1, if students wished to receive personal feedback on the study scales, they were asked to supply their email addresses. However, it was very clearly explained that if they wish to do so, they will be supplying us with personalized information and this is solely at their discretion.

On the other hand, Study 3 posed more challenges because access to the participant pool took place via Human Resources (HR) managers or the CEO of participating organizations who are ultimately in a position of power which might have affected whether employees choose to take part or not (Homan, 2001). To counter any coercive effects employees might have felt, standardized emails were prepared and sent to the designated gate-keepers who in turn circulated the emails to leaders and followers. Moreover, it was highlighted in the email that participation is utterly voluntary, that responses are kept completely confidential, and more importantly, that neither the organization nor the leader will have access to the data.

CHAPTER 5: EXPERIMENTAL STUDIES

CHAPTER SUMMARY

In this chapter, I subject the conceptual model presented in Figure 3.1 to empirical tests. After developing the hypotheses in Chapter 3, two experimental studies to establish internal validity are conducted. The methods section comprising of the study setting, sample characteristics and procedure is first discussed. Those are followed by the used measures and a section on data analysis. Finally, the findings of each of the studies are presented and discussed along with theoretical and practical implications, limitations, and avenues for future research.

5.1 STUDY 1

5.1.1 Method

In order to understand the direction and the nature of causal relationships and to establish internal validity, an experimental design was chosen for this study (Aguinis & Bradley, 2014; Grant & Wall, 2009). By conducting an experiment, alternative explanations for covariation between variables can be ruled out and a clearer understanding of underlying mechanisms and processes can be generated (Shrout & Bolger, 2002; Stone-Romero & Rosopa, 2010). Furthermore, an experimental approach is not uncommon in the study of SIT, SCT (Brewer, 1979; Tajfel, 1982), leadership (e.g., Bono & Judge, 2003; Grant, Hofmann, & Carolina, 2011; Sauer, 2011) and the SITL (Hains et al., 1997; Hogg et al., 1998; Platow & van Knippenberg, 2001).

5.1.1.1 Sample and Design

Participants. One hundred and fifty-one students from a UK-based business school participated in this study. Participants were approached during their personal development plan workshops that took place in May and June, i.e., term 3 of the academic year and asked to take part in exchange for personalized feedback on study scales along with refreshments. The mean age of participants was 24.3 years old, and of the total respondents, 48.7% were males and 51.3%

were females. The nationality of participants varied with 26% British, 19% Chinese, 8% Indian, 7% Nigerian, 4.5% German, 4% Greek, 3% Thai, 2% Vietnamese, 2% Cypriot, 2% Taiwanese, and each of Italy, Pakistan, Romania, France, and Singapore had a 1.4% representation. The remaining nationalities exhibited less than 1% each. In total, 93% were undertaking their postgraduate study and 7% were enrolled in undergraduate courses.

Procedure. Based on the scenario by Sauer (2011), participants were asked to play the role of a management consultant in Advance Consulting – a small management consulting firm which serves well-known clothing enterprises (please refer to Appendix 1). General demographic information about the firm was provided with the aim of not evoking any gender differences. Participants were told that they have been working with Advance Consulting for almost a year and that they just got assigned on a new project; a turnaround plan for a clothing manufacturer called Kimonos. They were informed that they will now work alongside a new leader, Thomas or Mary (pending on the condition), and that they have not met their leader before.

Participants were approached during the workshops and asked whether they would like to take part in a 30-minute study about leadership. Interested participants were then split by gender and ushered to separate rooms with trained administrators where they were randomly assigned to the female or male leader condition and the participative or directive leadership style condition. After walking participants through the information sheet, they were asked to sign an informed consent and this was followed by explaining the context of the study. Participants were then told that another member of the organization has already conducted an assessment report on Kimonos and that they will see a video of their leader discussing the results of the assessment report with one of their colleagues. In the videos, the alleged colleague had the same gender as that of the participants – a female colleague for female participants and a male colleague for male participants. They were later informed that their leader will address them with a message at the end of the video. The videos were displayed on a large screen using a projector. After the introduction, participants were subject to the different manipulations.

Design and Manipulations. A 2 (leader gender) x 2 (follower gender) x 2 (leadership style: participative vs. directive) between-subject design was adopted. Participants were split by gender and were randomly assigned to one of the experimental conditions based on their gender to control for their perception regarding how the leader deals with members of the opposite sex. The number of participants per cell ranged between 16 (in the male leader, male follower and directive leadership condition) and 20 (in the female leader, female follower, directive leadership condition; male leader, female follower, participative leadership condition; and male leader, male follower, participative leadership condition). Leader gender and leadership style were manipulated by means of showing participants four different videos of a male or female leader using a directive or participative leadership style. The video clips were created specifically for this study and the same actors appeared in the allotted conditions. *Leader gender* was manipulated by having either a male actor or a female actress appear in the respective experimental condition. The scripts for both actors were exactly the same. The actors were of similar, ethnicity, nationality, and age; White, British, and in their early 30's.

Largely based on the manipulation of leadership style by Sauer (2011), *leadership style* was manipulated through the leader's dialogue with the alleged participants' colleague who appeared in the video with the leader. The gender of the alleged colleague always matched the gender of the participants. The alleged colleagues were similar in terms of ethnicity, nationality, and age: They were both White, German, and in their late 20's. In the directive manipulation, the leader decides on the objectives of the tasks and gives the follower strict instructions on how to approach the project. In this manipulation, the leader does not invite any input from the follower. After the leader finishes briefing the follower on the next steps, they then look at the camera and address the participants with a message. The content of the message is based on items comprising directive leadership (Pearce & Sims, 2002). The leader informs the participants that they will set their performance objectives and standards and that they will provide them with guidelines on how to do their tasks. Moreover, the leader tells the participants that they will set their finalized

work schedules. The leader then asks the participants to do a task that they will be given and informs them that they have 3 minutes to finish the task. In the participative leadership manipulation, although the leader informs the follower that they have their own ideas on how to go about the project, they engage with the follower in a dialogue on what objectives to set and how to proceed with the work tasks. The video then shows the follower coming up with ideas while the leader welcomes the input. In this manipulation, the leader invites input from the follower and they together discuss what to do. As in the directive condition, after the leader finishes briefing the follower on the next steps, they then look at the camera and address the participants with a message. The content of the message is based on items comprising participative leadership (Arnold et al., 2000). In the message, the leader encourages the participants to express their ideas and suggestions and tells them that they will consider their input even if they initially disagreed with them. The leader then informs the participants that they will consider their take on things when putting forward the plan and objectives of the task. At the end of the video, the leader then asks the participants to do a task that they will be given and informs them that they have 3 minutes to finish the task.

Task. The experimental task was an ideation task and required participants to think, in 3 minutes, of as many items as possible that a clothing factory can generate. The use of ideation tasks in leadership research is not uncommon (Bono & Judge, 2003; Kahai et al., 2004; van Knippenberg & van Knippenberg, 2005) and has been used in contexts measuring constructs other than creativity while treating the ideation task as a mere output measure (Bono & Judge, 2003; van Dijke, De Cremer, & Mayer, 2010). In this experiment, the ideation task served to simulate a natural working environment between participants and their leader and was not used as a measure of leadership effectiveness. After the task, participants were asked to complete a questionnaire (Appendix 3). Throughout the experiment, participants were prompted not to collaborate with other participants in the room.

5.1.1.2 Measures

Manipulation Checks. Participants responded to 2 scales that assessed the leadership style exhibited by the leader. Directive leadership was measured by a 6-item scale (Pearce & Sims Jr, 2002). A sample item includes “My team leader sets the goals for my performance”. Participative leadership was also measured by a 6-item scale (Arnold et al., 2000) and a sample item is “My team leader listens to my ideas and suggestions”. Both scales were scored on a 5-point rating scale, ranging from 1=strongly disagree to 5=strongly agree. Both the directive ($\alpha = .76$) and the participative leadership scale ($\alpha = .93$) demonstrated good reliability.

Leadership style manipulation was piloted one week prior to the study with a group of students ($N = 41$; 22 females & 19 males) with similar demographics and from the same university from which the sample for the study was drawn. Participants in the pilot study were divided by gender and walked through the procedure of the study. They then responded to measures of leadership style and leadership effectiveness. Results of the pilot study indicated that participants in the directive leadership condition perceived the leader as being more directive than did participants in the participative leadership style condition ($M = 4.07$, $SD = .88$ vs. $M = 3.23$, $SD = .7$), $t(39) = -3.42$, $p < .01$). Moreover, participants in the participative leadership condition perceived the leader as being more participative than did participants in the directive leadership style condition ($M = 4.3$, $SD = .58$ vs. $M = 1.92$, $SD = .76$), $t(39) = 11.2$, $p < .001$).

I also checked whether there were any gender differences in the way participants perceived the different leadership styles. Results showed no significant differences in either the directive style manipulation ($(M = 3.63$, $SD = .77$ for males vs. $M = 3.65$, $SD = 1$ for females), $t(39) = -.07$, ns) and the participative style condition ($(M = 3.25$, $SD = 1.31$ for males vs. $M = 3.03$, $SD = 1.34$ for females), $t(39) = .5$, ns).

Leadership group prototypicality. Leader prototypicality was measured by a 3-item scale (van Knippenberg & van Knippenberg, 2005). A sample item is “My team leader represents what

is characteristic about my team”. Responses were scored on a 5-point rating scale, ranging from 1=strongly disagree to 5=strongly agree. The scale was highly reliable ($\alpha = .89$).

Leadership Effectiveness. To assess for leadership effectiveness, I included a measure on the perceptions of leadership effectiveness – one of the most widely used construct not only in the SITL literature (see Cicero et al., 2009; Pierro et al., 2005; van Knippenberg & van Knippenberg, 2005) but also in the wider leadership literature (Eagly et al., 1995; Martin et al., 2016; Paustian-Underdahl et al., 2014; Sauer, 2011). Perceptions of leadership effectiveness was measured by an 8-item scale adapted from the Multifactor Leadership Questionnaire (MLQ) (Avolio & Bass, 1997). A sample item is “My leader is effective in meeting my job-related needs”. Responses were scored on a 5-point rating scale, ranging from 1=not at all to 5=frequently if not always. The scale demonstrated high reliability ($\alpha = .9$).

5.1.1.3 Analysis Method

The hypotheses are presented in Table 5.1.

Hypotheses 1a, 1b, 2, 2a, and 2b were tested using analysis of covariance (ANCOVA) which is the standard analytical procedure used for experimental designs (see Hogg et al., 2006; Ryan & Haslam, 2005; Sauer, 2011; van Knippenberg & van Knippenberg, 2005) and particularly aids in exerting stricter experimental control through accounting for potential confounding variables in order to generate a ‘purer’ effect of the experimental manipulations (Field, 2009). To probe for specific interactions, post hoc analyses using the Sidak-Bonferroni adjustment were used (Sidak, 1967). This particular method was chosen, and not the Bonferroni adjustment, for, like the Bonferroni adjustment, it corrects the possibility for the familywise error rate for multiple comparisons while moderating the Bonferroni adjustment’s adverse impact on statistical power (Field, 2009; Keppel & Wickens, 2004). As recommended by Rosenthal and Rosnow (1991), a 4-variable interaction term was created denoting the interaction between leader gender and leadership style.

Table 5.1

Study Hypotheses

	Hypotheses
Hypothesis 1a	Female leaders who engage in a directive leadership style will be perceived as more prototypical than male leaders who engage in a directive leadership style
Hypothesis 1b	Male leaders who engage in a participative leadership style will be perceived as more prototypical than female leaders who engage in a participative leadership style
Hypothesis 2	The relationship between leader gender and leadership group prototypicality is contingent on leadership style and follower gender
Hypothesis 2a	Female leaders will be perceived to be more prototypical than male leaders when they exercise directive leadership; this effect will be further strengthened when followers are male rather than female
Hypothesis 2b	Male leaders will be perceived to be more prototypical than female leaders when they exercise participative leadership; this effect will be further strengthened when followers are male rather than female
Hypothesis 3a & 4a	Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is female compared to male and engages in directive leadership; (4a) the positive effect will be further strengthened for male rather than for female followers
Hypothesis 3b & 4b	Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is male compared to female and engages in directive leadership; (4b) the positive effect will be further strengthened for male rather than for female followers

For hypotheses 1a and 1b, follower gender (dummy coded as 0 = male participant and 1 = female participant) was entered as a covariate. As the experimental medium consisted of a video vignette whereby the leaders were English native speakers, a concern arises whether our international sample would be able to follow the scenario. I chose not to include subtitle messages in the videos as not to compromise experimental realism (Aguinis & Bradley, 2014) but I checked whether the nationality of the participants had an effect on the manipulation of leadership styles. I did not find significant differences for participative leadership but found marginal differences ($p < .1$) for directive leadership. As a result, I included participant nationality (dummy coded as 0 = British and 1 = other) as an additional covariate. For testing hypothesis 2, participant nationality was entered as a covariate.

Hypothesis 3a, 4a, 3b, and 4b were tested using bias corrected bootstrapping procedures recommended for testing moderated mediation (Preacher & Hayes, 2008; Preacher et al., 2007; Shrout & Bolger, 2002). The bootstrapping procedure generates a sampling distribution of the product of the regression coefficients through approximating the coefficients in numerous resamples that are representative of the population from which the sample of the study was drawn (Edwards & Lambert, 2007). Coefficient estimates are then used to compute the product of the

regression coefficients which are then rank ordered to locate percentile values that form 95% confidence interval (CI) (Edwards & Lambert, 2007; Preacher & Hayes, 2008). A bias-corrected confidence interval is then obtained by adjusting the confidence intervals for differences between the product from the sample and the median of the products estimated from the bootstrap samples (Edwards & Lambert, 2007; Preacher & Hayes, 2008). If the confidence intervals do not contain zero, then there is proof of moderated mediation (Preacher et al., 2007). Based on the recommendation of Hayes (2015), 10,000 bootstrap resamples will be used for this analysis.

5.1.2 Results

Manipulation Checks

Comparing means for participants' perception of leadership style, it was evident that participants in the participative leadership condition perceived the leader as being more participative than did participants in the directive leadership style condition ($M = 3.9$, $SD = .63$ vs. $M = 2.34$, $SD = .97$), $t(146) = 11.57$, $p < .001$. Participants in the directive leadership condition perceived the leader as being more directive than did participants in the participative leadership style condition ($M = 3.99$, $SD = .61$ vs. $M = 3.66$, $SD = .51$), $t(146) = -3.45$, $p < .01$. The frequencies, means, standard deviations, and intercorrelations for study variables are displayed in Table 5.2.

Confirmatory Factor Analysis

A confirmatory factor analysis (CFA) demonstrates the fit of a proposed factor model by comparing the observed covariance matrix to the population covariance matrix estimated from the hypothesized model (Schreiber, Nora, Stage, Barlow, & King, 2006) using a Chi-square test. However, given that the Chi-square test is particularly influenced by sample size, a more sensible benchmark is a significant Chi-square statistic to degrees of freedom ratio of 3:1 along with other fit indices. Although there is no general consensus over which fit indices, apart from the Chi-square test, to examine, the ones considered most robust and the least influenced by sample size are the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square of

Table 5.2

Frequencies, Means, Standard Deviations, and Intercorrelations for Study Variables

Variables	Frequency	M	SD	1	2	3	4	5	6
1 Follower nationality ^a				-					
<i>British</i>	36 (25.9%)								
<i>Non-British</i>	103 (74.1%)								
2 Follower gender ^b				.17*	-				
<i>Male</i>	73 (48.3%)								
<i>Female</i>	77 (51.3%)								
3 Leader gender ^b				0.01	0.00	-			
4 Directive leadership	3.82	0.58		-0.15	0.08	-0.07	-		
5 Participative leadership	3.14	1.13		0.09	-0.01	0.11	-.19*	-	
6 Leadership group prototypicality	2.97	0.94		0.03	-0.02	0.13	-0.05	.6**	-
7 Perceptions of leadership effectiveness	3.33	0.84		-0.00	-0.05	0.10	-0.09	.49**	.57**

Note. *N* = 149

^a 1 = non-British, 0 = British

^b 1 = female, 0 = male

* $p < .05$ (two-tailed test).

** $p < .01$ (two-tailed test).

approximation (RMSEA), and the standardized root mean square residual (SRMR) (Hu & Bentler, 1999). In line with Hu and Bentler (1999) and Byrne (2010), values between .90 and .95 for CFI and TLI are considered a good fit; values above .95 demonstrate excellent fit. As for the RMSEA, values below .08 indicate a good fit whereas a value of less than .08 is regarded acceptable for SRMR (Hu & Bentler, 1999).

I conducted a CFA using MPlus Version 7 (Muthén & Muthén, 1998 – 2012) to test the measurement model specifying leadership group prototypicality and perceptions of leadership effectiveness as separate factors. The remaining variables (leader gender, follower gender, and leadership styles) were not included as they were categorical. The hypothesized 2-factor model ($\chi^2(43) = 101.68$, CFI = .92, TLI = .9, RMSEA = .1, SRMR = .06) demonstrated better fit than the 1-factor model ($\chi^2(44) = 113.82$, CFI = .9, TLI = .87, RMSEA = .1, SRMR = .06) with the chi-square comparison showing that the 2-factor model fit the data in a more coherent manner than the single factor model: $\chi^2(1) = 12.14$, $p < 0.005$.

Hypothesis Testing

Hypothesis 1¹. Prior to testing hypotheses 1a and 1b, an ANCOVA was conducted to assess whether leadership style moderates the effect of leader gender on leadership group prototypicality. Results show that the interaction between leader gender and leadership style has a significant effect on leadership group prototypicality with $F(1,132) = 3.57, p < .1, \eta^2 = .03$.

Hypothesis 1a stated that female leaders who engage in a directive leadership style will be perceived as more prototypical than male leaders who engage in a directive leadership style. Indeed, participants viewed female leaders who engage in directive leadership as more prototypical ($M = 2.77, SD = .13$) than male leaders who engage in directive leadership ($M = 2.19, SD = .14$), $p < .05$, thus providing support for hypothesis 1a. The interaction is displayed in Figure 5.1. On the other hand, participants did not report a significant difference on leadership group prototypicality between male leaders and female leaders who engage in participative leadership ($M = 3.38, SD = .13$ for male leaders, $M = 3.43, SD = .14$ for female leaders, *ns.*) thus disconfirming hypothesis 1b. Results are presented in Table 5.3.

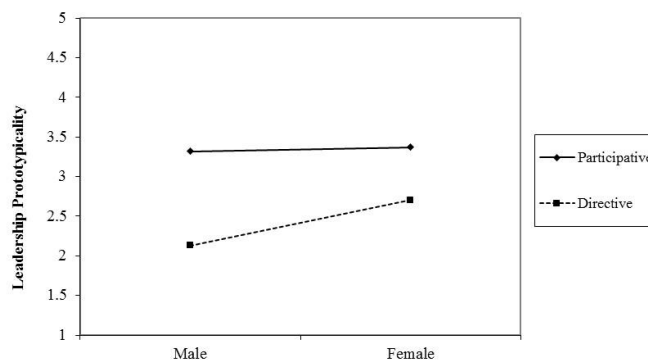


Figure 5.1. Interaction of Leader Gender and Leadership styles on Leadership group prototypicality.

¹ Although not hypothesized, we ran an ANCOVA to check whether gender has a direct effect on leadership group prototypicality. We found that participants viewed female leaders to be marginally more prototypical ($F(1,134) = 3.41, p < .1, \eta^2 = .02$). This is not surprising with the results of the recent meta-analysis by Paustian-Underdahl et al., (2014) showing females leaders to be rated more effective in business settings.

Hypothesis 2. Hypothesis 2 predicted that the relationship between leader gender and leadership group prototypicality is contingent on leadership styles and follower gender. ANCOVA results do not yield support for the 3-way interaction² ($F(1,129) = .33, ns$) thus disconfirming this hypothesis. Because of the lack of a significant 3-way interaction, hypotheses 2a and 2b which predicted the pattern of the difference were not supported as well.

Table 5.3

Analysis of Covariance Results for the Effects of Leader Gender and Leadership Style on Leadership Group Prototypicality

	Female Leader		Male Leader		<i>F</i> (1, 132)		
	Participative Style	Directive Style	Participative Style	Directive Style	Leader Gender	Leadership Styles	Interaction
Leadership Group Prototypicality	3.43 (.14)	2.77 (.13)	3.38 (.14)	2.19 (.14)	5.12*	44.83**	3.57*

Note. Values represent means and (standard deviations)

** $p < .05$

* $p < .1$

Although hypothesis 2 did not receive any support, moderated mediation hypotheses were still carried out since moderated mediation can still be manifest even when there is no significant interaction between the IV and the moderators (e.g., if the mediator operates at only some levels of the two moderators and direct effects occur at other levels) (James & Brett, 1984; Wegener & Fabrigar, 2000) (see below).

Index of Moderated Mediation

The index of moderated moderated mediation (given that my model is a 3-way interaction moderated mediation) quantifies how quickly the relationship between one moderator and an indirect effect varies as the second moderator changes (Hayes, 2015). The inference from this index is an inference about whether the moderation of an indirect effect of the IV (leader gender) on the DV (leadership styles) by the mediator (leadership group prototypicality) is moderated by the second moderator (follower gender). A bootstrap confidence interval (CI) for the index is proposed as a sensible inferential tool (Hayes, 2015). If a CI for the index of moderated

² It is worth noting that the 2-way interaction between leader gender and follower gender was also not significant ($F(1,129) = .18, ns$) thus confirming our postulation that leader gender and follower gender do not interact to influence measures of prototypicality per se.

moderated mediation contains zero, then one cannot definitively claim moderated mediation. It should be noted that the lack of significant effects of the index does not necessitate the there is no moderated moderated mediation effects taking place (Hayes, 2015). The lack of significant results for the index are taken to suggest that the moderated mediation hypothesis is not definitely supported but moderated mediation could still be inferred by checking the *index of conditional moderated mediation* (when the effect of the moderator changes at defined levels of the second moderator) (Hayes, 2015). Hayes (2015) posits that if the index of conditional moderated mediation by W (follower gender) at specific values of Z (leadership styles) is statistically different from zero, then this implies that W moderates the size of the indirect effect of X (leader gender) at the value of Z (leadership styles). In this case, an argument can be pieced together in favour of moderated moderated mediation.

In Study 1, the index of moderated moderated mediation was not significant perceptions of leadership effectiveness (perceptions of leadership effectiveness: index = $-.17$, $SE = .3$, 90% CI Low = $-.67$; 90% CI High = $.33$). However, the index of conditional moderated mediation (3-way interaction between leader gender, leadership styles, and follower gender on leadership group prototypicality) for Study 1 was marginally significant ($p < .1$) for perceptions of leadership effectiveness when the follower is male (index = $.38$, $SE = .24$, 90% CI Low = $.00$; 90% CI High = $.80$). The 3-way moderated mediation hypotheses were subsequently tested.

Hypothesis 3 and 4. Hypothesis 3a predicted that the first stage of the mediation path by leadership group prototypicality in the relationship between leader gender and leadership effectiveness will be moderated by leadership style such that when the leader is female as opposed to male and exercises directive leadership the indirect effect will be positive. Hypothesis 4a predicted that this relationship will be further strengthened for male rather than for female followers. Results for hypothesis 3a revealed that the difference between male and female leaders (0=male and 1=female) on leadership effectiveness is accounted for by leadership group prototypicality when the leader uses a directive leadership style. Female leaders are more

effective than male leaders because they are perceived as more prototypical (perceived leadership effectiveness: conditional indirect effect: .32, 95% CI Low = .09; CI High = .57).

Results for hypothesis 4a are depicted in Table 5.4. Moderated mediation analyses reveal that under directive leadership, leadership group prototypicality mediated the interactive effects of leader gender, follower gender, and directive leadership on perceptions of leadership effectiveness such that the effects were positive and stronger for male followers than for female followers when the leader is female compared to male. Overall, results indicate that female leaders are perceived to be more prototypical and consequently more effective than male leaders when they engage in directive leadership; the results are pronounced when the followers of the female leader are male rather than female. In sum, hypotheses 3a and 4a were supported.

Table 5.4

Summary of Conditional Indirect Effect of Leader Gender on Measures of Leadership Effectiveness via Leadership Group Prototypicality at Directive and Participative Leadership and at Follower Gender

Moderators		Outcomes
Leadership Styles	Follower Gender	Leadership Effectiveness
Directive Leadership	Male	.4 (.19)*
	Female	.24 (.15)
Participative Leadership	Male	.01 (.15)
	Female	.03 (.13)

Note. Standard errors are in parantheses. Significance levels are *p* -scores set at 95% and unstandardized path coefficients are reported

Hypothesis 3b predicted that the first stage of the mediation path by leadership group prototypicality in the relationship between leader gender and leadership effectiveness will be moderated by leadership style such that when the leader is male as opposed to female and exercises participative leadership the indirect effect will be positive. Hypothesis 4b predicted that this relationship will be further strengthened for male rather than for female followers. Results for hypothesis 3b did not reveal significant differences on leadership effectiveness between male and

female leaders under participative leadership style (perceived leadership effectiveness: conditional indirect effect: .02, 95% CI Low = -.16; CI High = .23).

Results for hypothesis 4b are displayed in Table 5.4. Moderated mediation analyses reveal that under participative leadership, leadership group prototypicality did not mediate the interactive effects of leader gender, follower gender, and participative leadership on leadership effectiveness. Thus, results of hypotheses 3b and 4b were not supported.

5.1.3 Discussion

Amidst the rise and the continued challenges that female leaders face in ‘stereotypically-male’ leadership roles (Catalyst, 2016a; Koenig et al., 2011), my goal was to develop a framework to capture how and when gender affects leadership effectiveness. Through addressing inconclusive findings in the gender dissimilarity literature (e.g., Tsui & O’Reilly, 1989) and in the RCT (Eagly & Karau, 2002), I developed a model grounded in the SITL (Hogg & Terry, 2000; Hogg et al., 2012; van Knippenberg & Hogg, 2003). The model explains the effect of leader gender on leadership effectiveness through leader prototypicality which is primarily hypothesized as a product of the interaction of leader gender with leadership style (directive vs. participative): Female leaders will be considered more prototypical than their male counterparts when they engage in directive leadership; the opposite relationship is predicted for participative leadership style. I also hypothesized that the interactive effects of leadership styles will become more pronounced once follower gender is considered: Female leaders with male followers will be considered more effective than female leaders with female followers and male leaders in general when they exercise directive leadership. On the other hand, male leaders with male followers will be considered more effective than male leaders with female followers and female leaders in general when they exercise participative leadership. The findings by and large support my model.

The results of Study 1 showed that, contrary to the RCT (Eagly & Karau, 2002) that states that female leaders are mostly backlashed when they exercise autocratic leadership styles and are more negatively rated than their male counterparts (Eagly & Johnson, 1990; Eagly et al., 1992),

when compared to male leaders, female leaders are considered more prototypical when they engaged in directive leadership. As participants watched the video of the leader interacting with a hypothetical colleague, they were able to observe the leader in live interaction which availed the room for them to form perception on who the leader is, what they represent, and how they relate to followers. Apart from demographics that signal group categorization, people look to a set of behaviors that prescribe in-group similarities and consider a leader prototypical if they engage in the behavior endorsed by the group (Hogg et al., 2012; Hogg, 2001). When females take the lead, they are regarded to be less congruent and less competent than males in leadership roles (Eagly & Karau, 2002; Ridgeway, 2004) and if they resort to directive leadership, they are engaging in a prototypical leadership style that accentuates the power of their positions thus asserting themselves in the leadership role (Sauer, 2011).

The difference in ratings of prototypicality between male and female leaders exercising directive leadership can be explained with the uncertainty reduction hypothesis (Hogg & Terry, 2000). Unlike male leaders, female leaders were likely to have caused uncertainty amongst some participants about whether they are competent and can drive work results (Chattopadhyay et al., 2011). Along the lines of the findings by Rast et al., (2013), exercising directive leadership has served to reduce this uncertainty rendering female leaders with directive leadership better than male leaders with directive leadership.

The fact that female leaders exercising directive leadership were considered more prototypical than male leaders engaging in the same behavior can be explained under the expectancy violations theory (Jussim et al., 1987). Female leaders who engage in directive leadership are seen to violate the stereotypical behavior associated with their gender (Eagly & Johnson, 1990; Heilman, 2001, 2012). Engaging in behavior atypical for their gender stereotype yet in line with the group norm renders female leaders more favorably evaluated than male leaders who engage in the same type of behavior (see Anderson et al., 2006; Lanaj & Hollenbeck, 2015). Furthermore, more recent evidence also supports the findings from my experiment –

women leaders at the top level of the organization were more effectively rated particularly due to the agentic behavior that they engaged in (Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010). The findings are also supported by additional contemporary evidence (Amanatullah & Morris, 2010; Amanatullah & Tinsley, 2013) showing that females who engage in more agentic behavior (directive leadership in this case) can also be perceived as serving the interest of the group. In my case, it might as well be that once a female engages in directive leadership, she signals an interest in the welfare of the followers she is leading – in making sure they meet objectives and performance requirements.

Moreover, the first moderated mediation hypothesis stating that leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness under directive leadership for female leaders more than for male leaders was supported. The results indicate that females are not only considered more prototypical than males when they exercise directive leadership, but are also considered more effective. This pattern is detrimental for male leaders.

In addition, the moderated mediation hypothesis stating that leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness under directive leadership for male followers was supported such that the relationship was positive for female leaders compared to male leaders. The results indicate that compared to female followers, male followers consider female leaders more prototypical than male leaders when they exercise directive leadership. They also perceive them as more effective. This pattern is weaker to non-significant for female followers.

The fact that our results are more pronounced for male followers unveils a different mechanism in play for either gender. With prior evidence showing how males devalued female leaders particularly when the latter engaged in agentic leadership behavior (Eagly & Johnson, 1990; Eagly et al., 1992; Ridgeway, 2004), my results show the opposite pattern. As males have ‘more to lose’ when they are being led by a female leader, they are bound to experience

heightened levels of uncertainty. Under such conditions, and in order for the female leader to drive leadership effectiveness, it might be skillful to establish herself as a prototypical leader and thus, engaging in a prototypical leadership style might not only mitigate uncertainty but also provide the male followers with a clear and unambiguous group norm (Hogg & Terry, 2000; Rast et al., 2012, 2013). Furthermore, violating the gender stereotype in a leadership role (i.e., a female leader engaging in directive leadership) might have a stronger impact on male followers who endorse gender stereotypes more than female followers (Brescoll et al., 2012; Eagly et al., 1992; Koenig et al., 2011). Under this postulation, male followers would then be more attuned to a female leader engaging in directive leadership and will thus evaluate her more favorably (Jussim et al., 1987); this is precisely what the results reveal.

The dynamics seem to take a different turn when it comes to female followers. Although prototypicality was the underlying mechanisms that led female leaders to empower female followers under directive leadership, the strength of the effect is weaker than that of male followers. This is likely to suggest that a female leader needs to engage in different leadership styles for either follower gender. And while there are several means to attenuate follower uncertainty (Chattopadhyay et al., 2011), it is safe to assume that a directive leadership style does not adhere well to female followers under female leadership.

On the other hand, my results showed that participants equally favored participative leadership for both male and female leaders. This is in line with previous research showing a general preference towards relationship-oriented leadership approaches, including participative leadership (DeRue et al., 2011; Judge et al., 2004). Another possible explanation for this result could be by the fact that my sample consisted of business school students who might have decreased stereotypes associated with gender, as found by other researchers (Powell et al., 2002). In that light, participants generally preferred participative leadership and the gender of the leader did not play a significant role. The findings do not reveal under what conditions male leaders are rendered more prototypical than female leaders. While engaging in participative leadership is

regarded an 'atypical' leadership behavior for males and thus should be more favorably evaluated under the expectancy violations theory (Jussim et al., 1987), it could well be that my sample endorses a more contemporary view of leadership that encompasses agentic and communal characteristics (Koenig et al., 2011). As such, engaging in participative leadership by male leaders is not regarded as deviating from the gender stereotype and is consequently not better evaluated than a female leader.

Furthermore, I did not find a significant mediation of leadership group prototypicality of the interaction between leader gender, participative leadership, and follower gender on leadership effectiveness. Although participants preferred participative leadership, it could well be that this leadership style is not ideal to render male leaders more effective than female leaders. On the other hand, it might be that both male and female leaders are considered prototypical when using participative leadership. More research in this area is recommended.

The second key finding clearly shows that it is not the similarity to the leader that drives leadership effectiveness as depicted in the dissimilarity literature (Tsui & O'Reilly, 1989). Rather it is the perception of leadership group prototypicality which is firstly a function of the interaction between leader gender, and leadership styles, and secondly a function of leader gender, leadership styles and follower gender. I found that leadership group prototypicality mediates the path from leader gender to leadership effectiveness. These results are believed in turn to lead to positive effect on performance; this comes in light of evidence showing that having positive perception of one's leader significantly affects performance (Hogan et al., 1994).

5.1.3.1 Theoretical Implications

The key theoretical contribution of this study lies in showing how the SITL is able to explain how and when female leaders are effective above and beyond the gender dissimilarity literature and the role congruity approach. This contribution builds on how and when female leaders are considered prototypical in a typical organizational context and was done by exploring how leader gender interacts with leadership style and follower gender to influence perceptions of

leader prototypicality which in turn leads to leadership effectiveness. Unlike previous research (Cejka & Eagly, 1999; Eagly & Karau, 2002; Ridgeway, 2004) that necessitated that female leaders engage in communal leadership behavior to be accepted, Study 1 offered a plausible way forward and extended the role congruity theory based on the SITL. I incorporated the expectancy violations theory and the uncertainty reduction hypothesis into the SITL and posit that for females to prosper in leadership roles, they have to adopt prototypical leadership behavior which would likely include a prototypically-male leadership style. The findings point to an interesting development in that directive leadership have a more detrimental effect on prototypicality for males but not for females and a particularly stronger effect for male followers rather than female followers.

In addition, my research contributed to the study of the SITL: While leader prototypicality has mainly been studied as a moderator (e.g., Giessner & van Knippenberg, 2008; van Knippenberg & van Knippenberg, 2005), this study explored the role of leadership styles in rendering leaders prototypical. In addition, this study adds to work of Rast and colleagues (2013) and Yoshida et al. (2013) by looking at the mediating role of prototypicality and how and when it leads to leadership effectiveness.

Furthermore, the findings of my study extended the work of Rast and colleagues (2013) on the SITL and the uncertainty reduction hypothesis by showing that directive leadership works to reduce the uncertainty induced by female leaders which eventually leads to positive evaluations of leadership effectiveness.

5.1.3.2 Practical Implications

The findings of this experiment shed important light for organizations seeking to fully equip their female leaders with tools to prosper in their leadership roles. For starters, this study bears good news to organizations as it seems that incongruent stereotypes negatively affecting the role of female leaders are on the decrease. With that being established, former leadership styles that were used to be detrimental for female leaders now play to their advantage, at least when

compared with their male counterparts. In that light, organizations can now train their female leaders on directive leadership and give them more leverage to practice the leadership style – at least in an organizational context similar to the one simulated in this experiment and specifically for male followers. Moreover, organizations are also compelled to support females in leadership positions particularly when they engage in agentic leadership behavior as this has been shown to positively drive leadership effectiveness through perceptions of leader prototypicality. In addition, organization can enhance the impact of their leaders by making sure that males do not resort to directive leadership. In addition, the findings could also inform practitioners that in order to exhibit leadership effectiveness, leader and follower demographics do not need to be matched. Rather, practitioners should make sure that the leader engages in ‘prototypical’ leader behavior in order to be effective, and that, in most organizational cases, is firstly agentic leadership behavior such as directive leadership.

5.1.3.3 Limitations and Future Avenues for Research

This study is not without its limitations. Firstly, while this study is characterized with high internal validity, it has low external validity (Shrout & Bolger, 2002). Future research in a field setting is recommended to replicate the findings. Secondly, the characteristics of the sample might have also played a role (Podsakoff et al., 2003). Participants were students put in an artificial setting which might look different had they been in a real work setting with ‘real leaders’. However, the effects found in this study might as well be stronger in a real setting and I might have found support for all my hypotheses. Although the moderated meditation model had a different source for our independent and dependent variable and is thus less prone to common method and source biases, our mediator and outcome measure suffer from common rater effect (Podsakoff et al., 2003). As such, I cannot conclude causality with regards to the mediator. Future research addressing this gap is recommended. Finally, exploring other leadership styles and their effects on prototypicality across a wider range of organizational tasks and settings is recommended for future research. The effect of leadership styles on leadership group

prototypicality has only been explored under heightened levels of uncertainty (e.g., Rast et al., 2013). As research indicates that originally non-prototypical leaders can gain support if they engage in behaviors favoring the group (Platow & van Knippenberg, 2001; van Knippenberg & van Knippenberg, 2005), it would be highly beneficial to build further on that stream of research and explore what leadership styles would render non-prototypical leaders endorsed by their groups. This would have implications not only for gender but is likely to affect other minority group members in leadership positions as well. Finally, it would also be worthwhile to explore what leadership styles render non-prototypical leaders prototypical under a context different to the one presented in this study. For example, in organizations where female leaders are regarded more prototypical, such as the education sector, it would be interesting to test what behaviors male leaders need to engage in to establish leadership group prototypicality.

5.3.4 Conclusion

In this study, I addressed the gap in the literature explaining how and when female leaders exhibit leadership effectiveness in what are typically considered masculine leadership roles. I shifted focus from the relational demography literature and the role congruity theory and grounded the analysis in the SITL by asserting that the path between leader gender and leadership effectiveness is mediated by leader prototypicality. The findings by and large support my predictions and suggest that SITL might provide a viable alternative explanation as to how and when female leaders exhibit leadership effectiveness. It also offers organizations an additional set of tools on which they can train their female leaders and support them in their leadership roles.

5.2 STUDY 2

Because of the importance of experimental replication in psychological research (Smith, 1970; Yong, 2012), Study 2 was designed with the aim of replicating the findings of Study 1 through using a different means to manipulate leader gender and leadership styles. While Study 1 employed a video manipulation, Study 2 used a scenario manipulation in order to show that the

reported effects of leader gender, follower gender, and leadership styles on leadership effectiveness are mediated by perceptions of leadership group prototypicality.

5.2.1 Method

5.2.1.1 Sample and Design

Participants. One hundred and seventy students from a UK-based business school participated in this study. Participants were approached at the start of tutorials on team working which they enrolled in as part of their undergraduate curriculum and during a workshop on communication and leadership that postgraduates were attending as part of their leadership course. Prospective participants were asked to take part in a 20-minutes study about leadership. The mean age of participants was 22.5 years old, and of the total respondents, 48.2% were males and 51.8% were females. More than half of the participants were UK citizens (53.3%), 8.4% were Chinese, 5.2% were Nigerian, 3% were French, 3% were Indian, 3% were Malaysian, 2% were Spanish, 2% were Pakistani, 1.5% were Greek, 1.5% were Ghanaian, 1.5% were Vietnamese, 1.5% Portuguese, and the remaining 14.1% were from 12 different countries. In total, 61% were undertaking their undergraduate study while 39% were enrolled in postgraduate degrees.

Procedure. The same procedure used in Study 1 was employed in Study 2 with merely two modifications: Instead of being informed that they will see their leader interact with one of their colleagues via a video-taped message participants were rather told that they will read a scenario of the interaction between their leader and a colleague of theirs and were given 3 minutes to do so. The gender of the colleague was not revealed in the scenario; participants were merely made aware that the colleague, referred to as [colleague] in the script, works with their leader as well. At the end of the scenario script, instead of having the leader address the participants with a video-taped message, participants, were to subsequently read the message that the leader addresses them with (please refer to Appendix 2). In order to make the gender of the leader salient, I included a profile picture of the actors that featured in Study 1 on the relevant scenario script. Again, both actors were British, White, and in their early 30's. The profile

pictures had the same facial expression (neutral). While participants were split by gender in Study 1 to control for the gender of the alleged colleague, Study 2 relied on providing participants with less informational cues about how the leader interacts with followers. As such, because the gender of the colleague was not revealed, there was no need to split participants by gender.

Design and Manipulations. The experimental design of Study 2 was the same as Study 1: A 2 (leader gender) x 2 (leadership styles: directive vs. participative) x 2 (follower gender) between-subject design. As in Study 1, the number of participants per cell ranged between 16 (in the male leader, male follower and directive leadership condition) and 28 (in the female leader, female follower, directive leadership condition). Leader gender was manipulated by means of showing participants a picture of the leader to increase experimental realism (Aguinis & Bradley, 2014). Still images of the leaders featured in the videos in Study 1 were captured such that they both portray a neutral expression and thus, a profile picture of each of the leaders was chosen. Leadership style was manipulated using the exact speech texts of the leaders featured in Study 1.

Task. In line with Study 1, the experimental task for Study 2 was an idea generation task which participants were given 3 minutes to complete. The topic of the task was slightly altered from that of Study 1 in order to exhibit more relevance to the experimental scenario. Therefore, instead of asking participants to generate as many items they can think of that a clothing manufacturer can generate (Study 1), participants in Study 2 were asked to list as many reasons as possible as to why employees can be unhappy at work. As in Study 1, the task in Study 2 served to simulate a natural working environment between participants and their leader and was not used as a measure of leadership effectiveness.

5.2.1.2 Measures

Manipulation Checks. The same scales as in Study 1 were used to measure whether the leadership style manipulation of directive ($\alpha = .73$) and participative ($\alpha = .93$) was successful.

Other measures. I used the same scale as in Study 1 to assess leadership group prototypicality ($\alpha = .85$) and perceptions of leadership effectiveness ($\alpha = .89$).

5.2.1.3 Analysis Method

I followed the same analysis method for Study 2 as in Study 1. Hypotheses 1a and 1b, 2, 2a, and 2b were tested using analysis of covariance (ANCOVA). For hypotheses 1a and 1b, follower gender (dummy coded as 0 = male participant and 1 = female participant) and participant nationality (dummy coded as 0 = British and 1 = other), were entered as covariates. As in Study 1, because of the high diversity inherent in the sample, I checked whether participant nationality had an impact on the manipulation of leadership styles. Results revealed that non-British participants saw the participative leadership manipulation as significantly more participative than British participants ($M = 3.63$, $SD = .9$ vs. $M = 3.06$, $SD = 1.1$), $t(165) = -3.63$, $p < .001$) which provides grounds for controlling for participant nationality. To probe for specific interactions, post hoc analyses using the Sidak-Bonferroni adjustment were used (Sidak, 1967). For hypotheses 2, 2a, and 2b, nationality was entered as a covariate. The moderated mediation hypotheses 3a, 4a, 3b, and 4b were tested using bias corrected bootstrapping procedures with 10000 bootstrap sample (Preacher & Hayes, 2008).

5.2.2 Results

Manipulation Checks

Comparing means for participants' perception of leadership style, it was evident that participants in the participative leadership condition perceived the leader as being more participative than did participants in the directive leadership style condition ($M = 4.06$, $SD = .57$ vs. $M = 2.68$, $SD = .93$), $F(1, 164) = 113.02$, $p < .001$, $\eta^2 = .41$.

Comparing means for participants' perception of leadership style, the analysis showed that participants in the directive leadership condition perceived the leader as being more directive than did participants in the participative leadership style condition ($M = 3.91$, $SD = .65$ vs. $M = 3.56$, $SD = .5$), $F(1, 170) = 14.831$, $p < .001$, $\eta^2 = .08$.

The frequencies, means, standard deviations, and intercorrelations for study variables are displayed in Table 5.5.

Confirmatory Factor Analysis

As in Study 1, I conducted a CFA using MPlus Version 7 (Muthén & Muthén, 1998 – 2012) to test the measurement model specifying leadership group prototypicality and perceptions of leadership effectiveness as separate factors whereby the remaining factors (leader gender, follower gender, and leadership styles) could not be included in the CFA. The hypothesized 2-factor model ($\chi^2(43) = 75.89$, CFI = .94, TLI = .92, RMSEA = .09, SRMR = .05) demonstrated better fit than the 1-factor model ($\chi^2(44) = 79.43$, CFI = .93, TLI = .91, RMSEA = .09, SRMR = .05) with the chi-square comparison showing that the 2-factor model fit the data in a more coherent manner than the single factor model: $\chi^2(1) = 3.54$, $p < 0.1$.

Hypothesis Testing

Hypothesis 1. Prior to testing hypotheses 1a and 1b, an ANCOVA was conducted to assess whether leadership style moderates the effect of leader gender on leadership group prototypicality. Results show that the interaction between leader gender and leadership style does not have a significant effect on leadership group prototypicality with $F(1,160) = .15$, *ns*. Because of the lack of significant interaction between leader gender and leadership styles, hypotheses 1a and 1b were not supported.

Hypothesis 2. Hypothesis 2 predicted that the relationship between leader gender and leadership group prototypicality is contingent on leadership styles and follower gender. ANCOVA results did not yield support for hypothesis 2³ ($F(1,157) = .57$, *ns*). As hypotheses 2a and 2b predicted the pattern of the 3-way interaction, they too were not supported.

As argued for Study 1, although I did not find significant moderation analyses for hypotheses 1a, 1b and 2, the moderated mediation hypotheses can still be probed (James & Brett, 1984; Wegener & Fabrigar, 2000)⁴.

³ The 2-way interaction between leader gender and follower gender on leadership group prototypicality was also not significant ($F(1,157) = .65$, *ns*).

⁴ As in Study 1, I calculated the index of moderated moderated mediation (Hayes, 2015). The index was not significant for perceptions of leadership effectiveness (index = -.24, $SE = .32$, 90% CI Low = -.8; 90% CI

Table 5.5

Variables	Frequency	M	SD	1	2	3	4	5	6
1 Follower nationality ^a				-					
<i>British</i>	89 (53.3%)								
<i>Non-British</i>	78 (46.7 %)								
2 Follower gender ^b				.020	-				
<i>Male</i>	82 (48.2%)								
<i>Female</i>	88 (51.8%)								
3 Leader gender ^b				-0.03	0.03	-			
4 Directive leadership	3.74	0.61		-0.12	-0.04	0.05	-		
5 Participative leadership	3.32	1.35		.27**	-0.11	-0.10	-.28**	-	
6 Leadership group prototypicality	3.02	0.86		.15*	-0.03	0.00	-0.08	.63**	-
7 Perceptions of leadership effectiveness	3.27	0.79		.17*	-0.06	-0.13	-0.02	.68**	.7**

Note. $N = 167$

^a 1 = non-British, 0 = British

^b 1 = female, 0 = male

* $p < .05$ (two-tailed test).

** $p < .01$ (two-tailed test).

Hypothesis 3 and 4. Hypothesis 3a predicted that the first stage of the mediation path by leadership group prototypicality in the relationship between leader gender and leadership effectiveness will be moderated by leadership style such that when the leader is female as opposed to male and exercises directive leadership the indirect effect will be positive. Hypothesis 4a predicted that this relationship will be further strengthened for male rather than for female followers. Moderated mediation analyses for hypothesis 3a showed that there was no indirect effect of leader gender (0 = male and 1 = female) on leadership effectiveness via leadership group prototypicality when the leader uses directive leadership style (perceived leadership effectiveness: conditional indirect effect: .06, 95% CI Low = -.18; CI High = .3).

Moderated mediation analysis for hypothesis 4a did not reveal an indirect effect of leader gender on leadership effectiveness via leadership group prototypicality for either of the follower genders when the leader uses directive leadership style (perceived leadership effectiveness for

High = .27). Additionally, the index for conditional moderated mediation for Study 2 was also not significant for perceptions of leadership effectiveness (index = -.24, $SE = .32$, 90% CI Low = -.79; 90% CI High = .24). For consistency, I include the moderated mediation analyses in-text.

male followers: conditional indirect effect: .06; 95% CI Low = -.32; CI High = .44; perceived leadership effectiveness for female followers; conditional indirect effect: .07; 95% CI Low = -.25; CI High = .37).). Thus, hypotheses 3a and 4a were not supported.

Hypothesis 3b predicted that the first stage of the mediation path by leadership group prototypicality in the relationship between leader gender and leadership effectiveness will be moderated by leadership style such that when the leader is male as opposed to female and exercises participative leadership the indirect effect will be positive. Hypothesis 4b predicted that this relationship will be further strengthened for male rather than for female followers. Results for hypothesis 3b did not reveal significant differences on leadership effectiveness between male and female leaders under participative leadership style (perceived leadership effectiveness: conditional indirect effect: .02, 95% CI Low = -.16; CI High = .23).

Hypothesis 4b revealed that under participative leadership, leadership group prototypicality did not mediate the interactive effects of leader gender, follower gender, and participative leadership on leadership effectiveness (perceived leadership effectiveness for male followers: conditional indirect effect: -.13; 95% CI Low = -.42; CI High = .14; perceived leadership effectiveness for female followers; conditional indirect effect: .12; 95% CI Low = -.12; CI High = .38). Thus, results of hypotheses 3b and 4b were not supported.

Further Analysis

Due to the lack of support for all of the hypotheses, I sought to explore whether the results of this experiment are more in line with the role congruity theory of prejudice against female leaders (Eagly & Karau, 2002). In their meta-analysis, Eagly et al. (1992) found that not only male leaders are better evaluated than female leaders in business settings, but also male followers exhibited a stark preference for male over female leaders. Although I did not hypothesize for the effects of leader gender, the interaction of leader and follower gender, and the interaction of leader gender and leadership styles on leadership effectiveness, I ran the analyses

using ANCOVA with participant nationality as a covariate to gain a better understanding of the effects of our experiment.

Data analysis revealed that, indeed, leader gender had a main effect on leadership effectiveness such that male leaders were perceived to be more effective ($M = 3.41$, $SD = .77$ vs. $M = 3.17$, $SD = .81$), $F(1,164) = 3.45$, $p < .1$, $h^2 = .02$).

Moreover, data also showed that the interaction between leader gender and follower gender yielded significant results on leadership effectiveness (perceptions of leadership effectiveness: $F(1,162) = 5.18$, $p < .05$, $h^2 = .03$). As can be seen from Figure 5.2 (perceptions of leadership effectiveness), male followers perceived the male leader to be more effective than the female leader ($M = 3.61$, $SD = .13$ for male leaders versus $M = 3.1$, $SD = .12$ for female leaders, $p < .05$). On the other hand, female followers did not exhibit any preference for either of the leader genders (perceived leadership effectiveness: $M = 3.2$, $SD = .12$ for male leaders versus $M = 3.25$, $SD = .11$ for female leaders, *ns*). Results are displayed in Table 5.6.

Table 5.6

Analysis of Covariance Results for the Effects of Leader Gender and Follower Gender on Leadership Effectiveness

	Female Leader		Male Leader		<i>F</i> (1, 162)		
	Female Follower	Male Follower	Female Follower	Male Follower	Leader Gender	Follower Gender	Interaction
Perceptions of leadership effectiveness	3.23 (.84)	2.77 (.13)	3.22 (.78)	3.6 (.71)	3.62*	1.15	5.18**

Note. Values represent means and (standard deviations)

** $p < .05$

* $p < .1$

5.2.3 Discussion

Overall, the results of Study 2 did not support the hypotheses and in that, they are not in line with the findings from Study 1. Participants did not show any preference for either of leader gender on leadership group prototypicality and leadership styles did not exhibit a significant moderating role. The 3-way interaction between leader gender, leadership styles, and follower gender also did not affect ratings of leadership group prototypicality and likewise, the moderated mediation model of the effect of leader gender on leadership effectiveness moderated by

leadership styles and (follower gender) and mediated by leadership group prototypicality was not significant as well.

The lack of significant findings prompted me to explore what mechanisms are present in this study. Guided by the role congruity theory for being an alternative explanation for the results, I found that, in the context of this experiment, male leaders received better ratings on outcomes of leadership effectiveness. What was also interesting is the fact that, in line with previous research, male participants significantly preferred male leaders over female leaders on perceptions of leadership effectiveness (Brescoll et al., 2012; Eagly et al., 1992; Koenig et al., 2011).

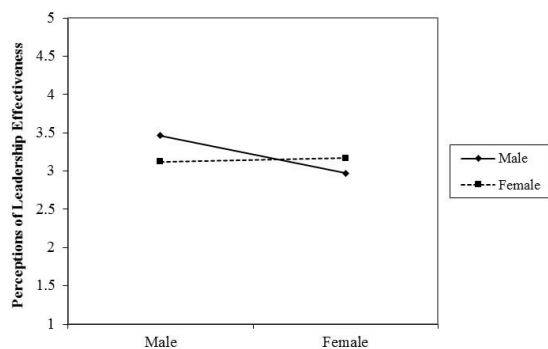


Figure 5.2. Interaction of Leader Gender and Follower Gender on Perceptions of Leadership Effectiveness.

The vast differences between the results of Study 1 and Study 2 can be mainly attributed to the change in the methodology – from a video display in Study 1 to a paper scenario in Study 2. Although both of the methodological media utilized the same scripts for the leader, the paper scenario relied solely on participants *reading* information on how the leader behaves as opposed to the video vignettes where participants could *observe* how the leader interacts with others and leads. Thus, it could well be argued that the paper vignette presented participants with less information cues than the video vignette which might have pervaded for gender to play an even more significant role that in turn paved the way for stereotypic biases and prejudices against females to take form (for a meta-analysis, see Tosi & Einbender, 1985). Moreover, the fact that the paper scenario displayed a picture of the leader might have also served to further highlight the

salience of leader gender above and beyond all other cues thus perpetuating the influence of gender stereotypes (Beckett & Park, 1995). Even though the video scenarios used in Study 1 also depicted leader gender, participants had the opportunity to observe the leader interact with a colleague which made the leader's behavior salient as well; thus diminishing the sole impact of gender (Pratto & Bargh, 1991; Tosi & Einbender, 1985).

Additionally, one could possibly argue that as the script in Study 2 was the same one used for the videos in Study 1, then participants received more or less similar individuating information about the leaders. However, the fact that individuating information works best to decrease stereotypes when participants have the cognitive capacity and motivation to do so (see Fiske, Lin, & Neuberg, 1999), it could well be that the participants did not put in much effort to assimilate the scenario or rather, they might have not paid enough attention to individuating cues which is essential to foster or mitigate stereotype formation (Pratto & Bargh, 1991) especially when approached during their tutorials and workshops. Although it can be argued that paper vignettes impose less cognitive load on participants, video scenarios that contain visual and non-visual cues are more meaningful because of their inherent complexity – a fact that stimulates participants to pay more attention to and engage more actively with (Hughes & Huby, 2002), 2004). Additionally, the time allocated to respond to the paper vignettes, but not to the video scenarios, might have had an adverse impact on the motivational and cognitive capacity of participants, requiring more thought and interpretation to process the presented information: Satisficing, a process whereby participants process vignette information less effectively and carefully, increases when a time constraint is imposed (Stolte, 1994) which was the case in the current study. When participants are presented with a visual imagery, such as the video scenarios, processing of information is more immediate and thus timing becomes less relevant (Hughes & Huby, 2002).

What is equally interesting about the pattern of my findings is that with limited information cues about the leader other than the salience of gender, role congruity theory (Eagly

& Karau, 2002) is better equipped at explaining the results than the SITL (van Knippenberg & Hogg, 2003). When I explored the effect of leader gender and the interaction between leader gender and follower gender on leadership effectiveness, the results portrayed a faithful validation of the role congruity theory in that a) male leaders were perceived more effectively in a stereotypically-male leadership positions such as the one depicted in our study; b) male followers preferred to be led by male leaders and gave female leaders much harsher evaluations; and c) female followers did not display biases in their preference to the gender of the leader (Eagly et al., 1995, 1992; Eagly & Karau, 2002). Although leadership group prototypicality was manipulated via paper scenarios in previous experiments (e.g., van Knippenberg & van Knippenberg, 2005), studies did not include gender which is a pervasive attribute that might have masked other information in the study. While bearing in mind the salience of gender along with the limited information cues that participants could derive from the paper scenario, the results of the study can still be explained under the lens of the SITL: For leadership group prototypicality to be established, followers need to gather sufficient information about the leader – to be sure that the leader represents the norms of the group (Hogg et al., 2012; van Knippenberg & Hogg, 2003). An example of such behaviour is engaging in different leadership behaviour (see van Knippenberg & van Knippenberg, 2005) as was shown in Study 1. Although the leadership style manipulations worked in both Study 1 and 2, participants in the second study were not able to establish leadership group prototypicality from the provided information. Indeed, neither leader gender nor the interaction between leader gender and leadership styles had an impact on leadership group prototypicality. Rather, what seemed to be more seminal is the salience of leader gender that pervaded perceptions of leadership effectiveness. As opposed to Study 1 where leader gender did not have an influence over perceptions of leadership effectiveness, participants in Study 2 perceived the male leader to be more effective than the female leader. Moreover, the allotted time to process and respond to the paper scenario in Study 1 might have also incurred difficulty on participants to solicit information about leadership group prototypicality (Pratto &

Bargh, 1991; Stolte, 1994). This is largely evident in the fact that the interaction between leader gender and leadership styles did not impact on leadership group prototypicality in Study 2 whereby it was significant in Study 1.

A prototypical leader is one who represents the group prototype and embodies the characteristics of the group – with limited informational cues and under time pressure to derive information, participants might have been unable to decipher the behaviour of the leader from the paper scenario and thus could not endorse them as prototypical. Thus, the results of Study 2 imply that gender salience and limited information cues act as boundary conditions on the perceptions of leadership group prototypicality. With gender being a pervasive demographic characteristic and as participants were not able to derive much information about neither the leader nor their group from the paper vignettes, this implies that participants were not able to identify with the ‘experimental group’. As such, leadership prototypes (explained through the lens of the role congruity theory, Eagly & Karau, 2002) as opposed to group prototypes became more evident (see Lord & Hall, 2003; van Knippenberg & Hogg, 2003) leading participants to favour male versus female leaders.

5.2.3.1 Theoretical Implications

Although this study does not explicitly contribute to the SITL and research on the effectiveness of female leaders in the way Study 1 did; nevertheless, the results further advance the SITL and assert, in line with other researchers (Hogg et al., 2006; van Knippenberg, 2011), that leadership group prototypicality does not hinge on demographic characteristics; it is rather the behaviour of the leader that is paramount in determining whether they are endorsed or not. In the absence of a clear group norm, and regardless of the salience and pervasiveness of gender, participants did not regard neither the female leader nor the male leader as prototypical members. While this bears good news in that when the group norm is not well communicated or made clear, participants do not derive perceptions of leadership group prototypicality based on limited information or even pervasive characteristics such as gender. It seems evident that for leadership

group prototypicality to be established, participants go beyond gender-based attributes and would need further information to solicit leadership group prototypicality – a requirement which was not accessible in the paper vignette. However, what the results further indicate is that in the absence of a clear group norm and information about the leader, participants resort to stereotypes and prejudice-related impressions to judge the effectiveness of a leader. It is thus not surprising that under the conditions of Study 2, the results are more in line with the role congruity theory as opposed to the SITL (Ealgy and Karau, 2002; see Hogg et al. 2006).

5.2.3.2 Practical Implications:

The results of Study 2 bear important implications for practice. For starters, gender plays such a pervasive role that it can mask other pieces of information. This becomes seminal for practitioners to keep in mind when screening job applications and resumes where gender plays an integral part in availing room for stereotypes and prejudice, particularly against women leaders, and thus overshadows other important attributes (Tosi & Einbender, 1985).

Moreover, these results prove crucial for organizations who newly appoint females in leadership roles. While meeting the leader for the first time or having few information circulated about the leader will put females at a disadvantage, organizations are encouraged to communicate further information to employees about female leaders and to possibly arrange meetings between the leader and employees whereby the latter can witness the leader engage in an array of behavior that would possibly eliminate stereotypical views on female leaders.

5.2.3.3 Limitations and Avenues for Future Research

As is the case with Study 1, Study 2 exhibits high internal validity but has low external validity (Shrout & Bolger, 2002) and thus research in a field setting is recommended. Moreover, a field study would prove essential in asserting that for leadership group prototypicality to be established, it requires time and frequent interactions between the leader and followers. Although I tried to replicate Study 1 and to show that the results will hold via different experimental

methods (video versus paper scenario), replication would have been best had the same manipulation means as in Study 1 been used (Yong, 2012).

Moreover, although I tried to produce a faithful replication for Study 1, I did not account for the pervasiveness that gender would play in a paper scenario experiment (Tosi & Einbender, 1985). Future research should look at the replicating the results of Study 1 possibly while removing the pictures associated with the scenario scripts. Another means of replication would be through elaborating and providing more versus less information on how the leader interacts with their followers.

5.2.4 Conclusion

In this study, I attempted to replicate the findings from Study 1 and to show that the path between leader gender and leadership effectiveness is mediated by leadership group prototypicality and moderated by leadership styles and follower gender. Although I did not find support for the hypotheses, this study highlights that gender salience and limited information cues about the leader might be a boundary condition of the SITL. Under the lack of sufficient time and information for followers to establish perceptions of leadership group prototypicality, stereotypes pervade perceptions and the role congruity theory would be better suited to explain the results. The findings offer organizations further guidelines on how to support and effectively prepare the grounds for their female leaders.

CHAPTER 6: FIELD STUDY

CHAPTER SUMMARY

In this chapter, I subject the conceptual model to a final empirical test (Study 3) to establish external validity and thus to assess whether my findings are generalizable to the workplace (Bryman, 2012; Shadish et al., 2002; Winer, 1999). Moreover, in a field study that is characterized by increased interaction between leaders and followers, Study 3 provides a more viable context for followers to pick up on information cues and, in return, to establish leadership group prototypicality. I first start by discussing the methods section which is followed by the used measures and a section on data analysis. The findings of Study 3 are then discussed along with the theoretical and practical implications, limitations, and avenues for future research.

6.1 METHOD

Sample

Participants. One hundred and seventy-six employees from 10 small to medium sized organizations operating in the services sector in Lebanon and Germany were invited to take part in the study. Out of these, 126 employees provided usable data, constituting a response rate of 71.6%. Nine organizations were based in Lebanon and one is the German-subsiary of a US-based commodity trading firm. Of the 9 companies in Lebanon, one is in the waste-management field and provides services across the Middle East and North Africa (MENA), three provide IT and project management support to clients in Lebanon and the MENA region, one is in the manufacturing business, two provide learning and education support to Lebanese and international clients, one offers food safety consulting services in the MENA region, and one offers design consulting. The age for leaders ranged from 27 to 60 ($M = 38$, $SD = 9.2$) and 49.4% were male. Employees' age ranged from 21 to 61 ($M = 34.02$, $SD = 10.73$) and 55.6% were male.

Procedure. Followers were asked to complete an online questionnaire (Appendix 4) assessing the study variables. In detail, participants rated their leader's leadership style (directive and participative) and the extent to which they regarded their leader as prototypical. They also

responded to a measure leadership effectiveness. Moreover, followers also reported demographics pertaining to age, organizational tenure, the duration they have worked with each (leader-follower tenure), along with company membership. They also reported their leader demographics. These variables were subsequently included as controls in the analyses. I controlled for leader-follower tenure as previous research has shown that that duration of acquaintance affects perceptions of leadership effectiveness (Somech, 2003). I also controlled for leader and follower age and organizational tenure as both variables have effects on leadership effectiveness (Caldwell & O'Reilly, 1982; Collins, Hair, & Rocco, 2001; Gilbert, Collins, & Brenner, 1990; Wright & Bonett, 2002). Finally, I controlled for company membership to account for industry differences as well as differences in organizational and national culture.

In 7 of the 10 participating organizations, links to the online versions of the follower survey were sent by either the Human Resources manager or the managing director. For the remaining 3 companies, links were sent separately to the followers by an HR administrator. For data collection in Lebanon, the scales were kept in their English versions. Being established as a multilingual society, Lebanon uses Arabic, French, and English in its daily communication with the latter being predominant in the economic, education, and social domains (Shaaban & Ghaith, 2002; Shaaban, 2005). As for data collection in Germany, scales that were not readily available in their German versions were translated by a German native speaker and back translated by another 2 native speakers in order to ensure its validation and effective use in a cross-cultural context (Behling & Law, 2000; Cha, Kim, & Erlen, 2007). While keeping in mind that solely back-translation might not be sufficient to ensure cross-cultural validity (Beaton, Bombardier, Guillemin, & Ferraz, 2000), reviewing the items in the scales did not reveal discrepancies and misconceptions between the German respondents and the Lebanese ones. In addition, cross-cultural validity problems were considered unlikely for the constructs used in this study such as leadership group prototypicality and directive and participative leadership, have been studied in numerous cultures (e.g., Cicero et al., 2007; Hogg et al., 2006; Kahai et al., 2004; Rast et al.,

2013; Somech, 2003). Participating employees were allowed to complete the surveys during their working hours.

6.1.1 Measures

Independent variables Followers reported their gender on a binary item with 0 = males and 1 = female. Followers were also asked to indicate the gender of their leaders. As in studies 1 and 2, the same scales used to test for directive leadership (Pearce & Sims Jr, 2002) ($\alpha = .84$) and participative leadership (Arnold et al., 2000) ($\alpha = .71$) were used.

Dependent variables. As in the previous experiments, the same scales were used to measure leadership group prototypicality (van Knippenberg & van Knippenberg, 2005) ($\alpha = .85$) and perceptions of leadership effectiveness (Avolio & Bass, 1997) ($\alpha = .93$). .

Control variables. Followers were asked to report theirs and their leader's age and organizational tenure in years. They were also asked to report, in years, the duration with which they worked with each other. Finally, company membership was dummy coded with 0 = respective company and 1 = all other companies. As a result, 9 dummy coded variables were generated.

Analysis method

The study hypotheses are presented in Table 6.1. Hypotheses 1a and 1b were tested using hierarchical linear regressions. Following the recommendations of Dawson (2014), all variables except the dependent variables and leader gender were mean centered. In step 1 of the analysis, follower and leader age, organizational tenure, leader-follower tenure, and company membership were entered as control variables. In step 2, leader gender, follower gender, and participative and directive leadership were added. In step 3, the 2-way interaction terms between leader gender and each of the leadership styles were entered. To probe for the direction of the 2-way interaction, simple slope tests were conducted (Preacher, Curran, & Bauer, 2006; Wilkinson & Force, 2003). Likewise, hypothesis 2 was tested using hierarchical linear regression. Following the same steps as for hypothesis 1, interaction terms between leader gender and follower gender, and follower

gender and each of the leadership styles were further added to step 3. The 3-way interaction term was entered in the final step. The 3-way interaction terms for each of participative and directive leadership were separately tested to avoid possible collinearity between predictors (J. Dawson, personal communication, April 29th, 2016). Simple slope tests were also used to probe for the direction of significance. Finally, as in studies 1 and 2, hypotheses 3a, 4a, 3b and 4b were tested using bias corrected bootstrapping procedures recommended for testing moderated mediation (Preacher & Hayes, 2008; Preacher et al., 2007). A 10,000 bootstrap resample was used for the analyses.

Table 6.1

<i>Study Hypotheses</i>	<i>Hypotheses</i>
Hypothesis 1a	Female leaders who engage in a directive leadership style will be perceived as more prototypical than male leaders who engage in a directive leadership style
Hypothesis 1b	Male leaders who engage in a participative leadership style will be perceived as more prototypical than female leaders who engage in a participative leadership style
Hypothesis 2	The relationship between leader gender and leadership group prototypicality is contingent on leadership style and follower gender
Hypothesis 2a	Female leaders will be perceived to be more prototypical than male leaders when they exercise directive leadership; this effect will be further strengthened when followers are male rather than female
Hypothesis 2b	Male leaders will be perceived to be more prototypical than female leaders when they exercise participative leadership; this effect will be further strengthened when followers are male rather than female
Hypothesis 3a & 4a	Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is female compared to male and engages in directive leadership; (4a) the positive effect will be further strengthened for male rather than for female followers
Hypothesis 3b & 4b	Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is male compared to female and engages in directive leadership; (4b) the positive effect will be further strengthened for male rather than for female followers

6.1.2 Results

Means, standard deviations, and intercorrelations for all variables are presented in Table 6.2.

Confirmatory Factor Analysis

I conducted a CFA using MPlus Version 7 (Muthén & Muthén, 1998 – 2012) to test whether the measurement model specifying leadership group prototypicality and perceptions of leadership effectiveness has a better fit than the single factor model. This result shows that the hypothesized model fit the data in a more coherent manner than the single factor model (2-factor

model: $\chi^2(43) = 91.9$, CFI = .95, TLI = .93, RMSEA = .09, SRMR = .04; 1-factor model: $\chi^2(44) = 208.1$, CFI = .82, TLI = .78, RMSEA = .17, SRMR = .08). The chi-square comparison showed that the 3-factor model has better fit than the one-factor model: $\chi^2(1) = 116.2$, $p < 0.005$.

Hypothesis 1. Hypothesis 1a stated that female leaders who engage in a directive leadership style will be perceived as more prototypical than male leaders who exercise directive leadership. Results of the hierarchical linear regressions revealed a significant interaction between leader gender and directive leadership style ($\beta = .14$, $p < .1$). Subsequently, I plotted the interaction effect and ran simple slope tests as stipulated by Preacher, Curran, and Bauer (2006) to check whether the nature of the interaction is in the hypothesized direction. Slopes for values of directive leadership at one and two standard deviations above and one standard deviation below the mean are not significantly different than zero ($b = -.37$, $SE = .2$, $p = \text{n.s.}$, $b = .31$, $SE = .28$, $p = \text{n.s.}$, and $b = .08$, $SE = .19$, $p = \text{n.s.}$) but slopes become different than zero at two standard deviations below the mean with $b = -.6$, $SE = .28$, $p < .05$. As evident in Figure 6.1 which is based on the $\pm 2SD$ of the moderator, although both males and females are considered more prototypical when they engage in high levels of directive leadership, female leaders are considered less prototypical than their male counterparts when they exercise low levels of directive leadership thus providing partial support for hypothesis 1a.

Hypothesis 1b stated that male leaders who engage in participative leadership styles will be perceived to be more prototypical than female leaders who exercise participative leadership. Results of our regressions do not reveal a significant interaction between leader gender and participative leadership ($\beta = .01$, $p = \text{n.s.}$). As such, hypothesis 1b was not supported.

Table 6.2

Means, Standard Deviations, and Intercorrelations for Study Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1 Company 1 ^a	0.59	0.49	-																		
2 Company 2 ^a	0.85	0.36	-.35**	-																	
3 Company 3 ^a	0.90	0.31	-.28**	-0.14	-																
4 Company 4 ^a	0.98	0.15	-0.13	-0.06	-0.05	-															
5 Company 5 ^a	0.97	0.18	-0.15	-0.07	-0.06	-0.03	-														
6 Company 6 ^a	0.97	0.18	-0.15	-0.07	-0.06	-0.03	-0.03	-													
7 Company 7 ^a	0.90	0.29	-.27**	-0.13	-0.11	-0.05	-0.06	-0.06	-												
8 Company 8 ^a	0.92	0.27	-.24**	-0.12	-0.10	-0.05	-0.05	-0.05	-0.10	-											
9 Company 9 ^a	0.96	0.20	-0.17	-0.08	-0.07	-0.03	-0.04	-0.04	-0.07	-0.06	-										
10 Follower org. tenure	7.79	8.18	-0.06	0.06	.208*	-0.06	0.04	0.15	-.64**	.20*	0.15	-									
11 Leader org. tenure	10.46	6.77	-0.1	-0.15	.34**	0.00	-0.01	.19*	-.47**	.23**	0.13	.52**	-								
12 Leader-follower tenure	3.95	4.54	0.33	0.02	0.08	0.04	0.10	.12	-.59**	.12	0.16	.65**	.52**	-							
13 Leader age	38.11	8.19	-0.03	0.08	.33**	0.02	0.09	-0.03	-.63**	.29**	.18*	.48**	.67**	.48**	-						
14 Follower age	34.03	10.74	-0.08	0.06	0.14	-0.05	0.03	0.15	-.55**	.23**	.23**	.86**	.45**	.61**	.51**	-					
15 Leader gender ^b	0.43	0.50	0.07	.36**	-.33**	0.14	-.21*	-0.03	0.17	-0.04	-.23**	-.35*	-.36**	-.26**	-.28**	-.38**	-				
16 Follower gender ^b	0.44	0.50	0.1	0.11	-.32**	0.03	-0.02	-0.02	0.02	0.14	-0.06	-.18*	-0.16	-0.11	-0.10	-.24**	.38**	-			
17 Directive leadership	3.44	0.79	0.04	-0.05	-0.03	-0.03	0.07	-0.03	.31**	-.17*	-0.11	-.36*	-.25**	-.23**	-.2*	-.33**	0.15	0.02	-		
18 Participative leadership	4.14	0.50	0.06	-0.04	0.02	-.216*	0.04	0.13	-0.01	0.03	-0.13	-0.03	0.05	0.04	-0.03	-0.11	0.17	0.07	.27**	-	
19 Leadership Group Prototypicality	3.77	0.80	0.12	-0.15	0.03	-0.11	-0.02	0.04	.187*	-0.09	-0.03	-0.07	0.04	0.04	-0.11	0.03	-0.01	-0.05	.51**	.33**	-
20 Perceptions of leadership effectiveness	4.07	0.77	0.09	-0.02	0.05	-0.12	-0.04	0.11	0.02	-0.05	-0.10	-0.05	0.01	0.04	-0.05	-0.03	0.15	-0.03	.46**	.58**	.56**

Note. $N = 126$ ($n = 80$ for inrole behavior, OCB, and CWB).

^a 1 = respective company, 0 = all other companies

^b 1 = female, 0 = male

* $p < .05$ (two-tailed test).

** $p < .01$ (two-tailed test).

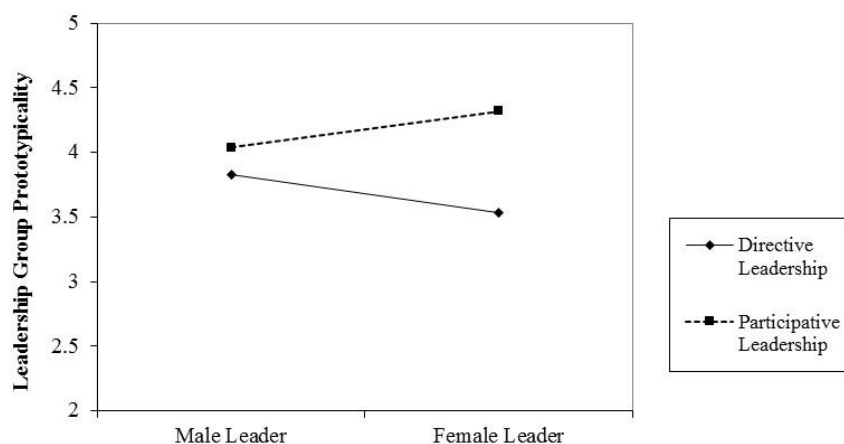


Figure 6.1: Interaction of Leader Gender and Directive (+/-2SD) on perceptions of Leadership group prototypicality.

Hypothesis 2. Hypothesis 2 proposed that the relationship between leader gender and leadership group prototypicality is contingent on leadership styles and follower gender. Hierarchical regression results revealed a significant 3-way interaction⁵ between leader gender, participative leadership, and follower gender, with $\beta = -1.042$, $p < .1$ and between leader gender, directive leadership, and follower gender with $\beta = -.564$ $p < .1$ thus providing support for hypothesis 2. In order to test whether the direction of the hypothesized relationship is in line with hypotheses 2a and 2b, simple slope tests were conducted at +/- 1SD and +/- 2SD of the continuous moderator (participative and directive leadership) (Dawson, 2014; Preacher et al., 2006). Hypothesis 2a stated that female compared to male leaders will be perceived to be more prototypical when they use a high rather than low directive leadership style and that this will be further pronounced for male versus female followers.

The three-way interaction is depicted in Figure 6.2. In line with hypothesis 2a, female leaders are perceived to be more prototypical than male leaders when they use a higher rather

⁵ It is worth noting that the interaction between leader gender and follower gender was, as argued, non-significant ($\beta = -.1$, $p = \text{n.s.}$) in both of the 3-way interaction analyses.

than lower directive leadership style which is more pronounced for male than for female followers. While simple slope tests did not differ from zero for +/- 1SD of the value of directive leadership (- 1SD, for male followers: $b = -.51$, $SE = .31$, $p = n.s.$, for female followers: $b = -.34$, $SE = .25$, $p = n.s.$; + 1SD, for male followers: $b = .42$, $SE = .25$, $p = n.s.$, for female followers: $b = -.36$, $SE = .28$, $p = n.s.$), they significantly differed from zero at +/- 2SD of directive leadership with $b = -.96$, $SE = .46$, $p < .05$ for male followers and $b = -.33$, $SE = .38$, $p = n.s.$ for female followers under -2SD of directive leadership and $b = .88$, $SE = .39$, $p < .05$ for male followers and $b = -.36$, $SE = .42$, $p = n.s.$ for female followers under +2SD of directive leadership. Results thus indicate that male followers considered female leaders more prototypical than male leaders when they exercised more directive leadership and the results are more pronounced for males versus female followers thus supporting hypothesis 2a.

Hypothesis 2b proposed that male leaders will be perceived to be more prototypical than female leaders when they exercise participative leadership and that this effect will be further strengthened when followers are male rather than female. Simple slope tests did not significantly differ from zero for +/- 1SD and +/- 2SD of participative leadership (-1SD, for male followers: $b = -.33$, $SE = .34$, $p = n.s.$, for female followers: $b = -.21$, $SE = .26$, $p = n.s.$; +1SD, for male followers: $b = .37$, $SE = .3$, $p = n.s.$, for female followers: $b = -.52$, $SE = .28$, $p = n.s.$; -2SD: for

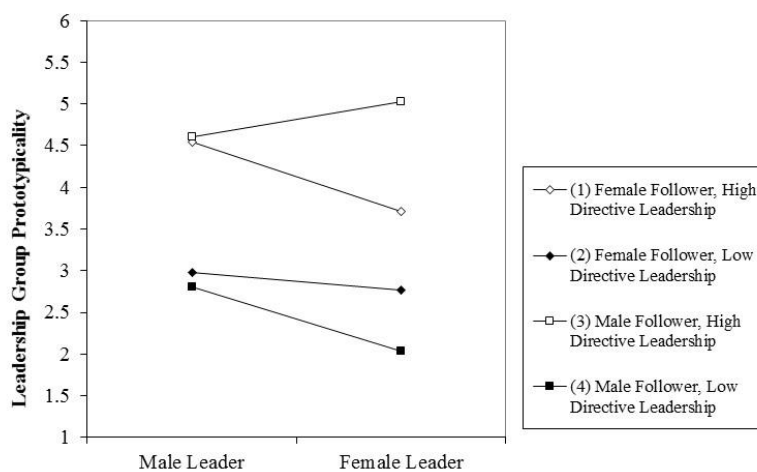


Figure 6.2. Interaction of Leader Gender, Directive Leadership, and Follower Gender on Leadership group prototypicality.

male followers: $b = -.71$, $SE = .57$, $p = \text{n.s.}$; for female followers: $b = -.05$, $SE = .4$, $p = \text{n.s.}$; +2SD: for male followers: $b = .74$, $SE = .52$, $p = \text{n.s.}$; for female followers: $b = -.68$, $SE = .43$, $p = \text{n.s.}$). Thus, hypothesis 2b was not supported.

Index of Moderated Mediation

Prior to testing the moderated mediation hypotheses, I calculated the index of moderated moderated mediation (Hayes, 2015). The index was not significant on leadership effectiveness for neither directive leadership (perceptions of leadership effectiveness: index = $-.24$, $SE = .17$, 95% CI Low = $-.66$; 95% CI High = $.02$) nor participative leadership (perceptions of leadership effectiveness: index = $-.48$, $SE = .32$, 95% CI Low = -1.14 ; 95% CI High = $.06$). However, the index for conditional moderated mediation for Study 3 revealed significant results on perceptions of leadership effectiveness under high levels of directive leadership (+ 1SD) (index = $-.32$, $SE = .18$, 95% CI Low = $-.75$; 95% CI High = $-.02$) and when the follower is male (index = $.23$, $SE = .11$, 95% CI Low = $.05$; 95% CI High = $.50$). The results allow for the investigation of Hypotheses 3 and 4.

Hypothesis 3 and 4. Hypothesis 3a predicted that leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is female compared to male and engages in directive leadership.

Hypothesis 4a predicted that the positive effect will be further strengthened for male rather than for female followers. Moderated mediation analyses were run for +/- 1SD and +/- 2SD of the value of directive leadership and the results are presented in Table 6.3. The findings indicate that leadership group prototypicality mediated the interactive effect of leader gender and directive leadership on perceptions of leadership effectiveness such that the effect was negative when the female leader engaged in low (-1SD and -2SD) levels of directive leadership. Moderated mediation analyses for hypothesis 4a were run for -/+ 1SD and -/+ 2SD of the value of directive leadership; results are displayed in Table 6.4. I found that under high levels of directive leadership (+2SD), leadership group prototypicality mediated the interactive effects of leader

gender, follower gender, and directive leadership on perceptions of leadership effectiveness such that the effects were positive and stronger for male followers than for female followers when the leader is female compared to male. On the other hand, I found that when the female engaged in low levels of directive leadership ($-2SD$), the effect on male followers was significant but negative. In sum, the results largely support hypothesis 3a and 4a.

Hypothesis 3b predicted that leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is male compared to female and engages in directive leadership; hypothesis 4b predicted that the positive effect will be further strengthened for male rather than for female followers. Moderated mediation analyses were conducted for $\pm 1SD$ and $\pm 2SD$ of the value of participative leadership and the results are presented in Table 6.3. As shown, leadership group prototypicality did not mediate the effect of leader gender on leadership effectiveness when the leader engaged in participative leadership. Hypothesis 3b is thus not supported. With regards to hypothesis 4b, analyses (presented in Table 6.4) show that leadership group prototypicality did not mediate the interactive effects of leader gender, participative leadership, and follower gender on leadership effectiveness and therefore, hypothesis 4b is not supported.

6.2 DISCUSSION

The results of the field study are in line with Study 1 and externally validate my conceptual model which aims at capturing how and when female leaders drive leadership effectiveness. In order to explain how and when female leaders can be effective in what are typically male-leadership positions (Cejka & Eagly, 1999; Gupta et al., 2008; Heilman, 2012; Koenig et al., 2011), I grounded the analysis in the SITL (van Knippenberg & Hogg, 2003) and explained the effect of leader gender on leadership effectiveness through leadership group prototypicality. I predicted that the interaction between leader gender, leadership styles (directive vs. participative) and then between leader gender, leadership styles, and follower gender influences perceptions of

leadership group prototypicality which in turn paves the way for leadership effectiveness. Particularly, I hypothesized that female (male) leaders who engage in directive (participative) leadership will drive leadership effectiveness through being perceived more prototypical than her (his) male (female) counterpart; this effect will particularly be pronounced for male followers. While I did not find support for the effectiveness of male leaders, my findings regarding the female leader by and large support the hypotheses.

When looking at how leadership styles interact with leader gender to influence perceptions of leadership group prototypicality, I found that there were no differences between male and female leaders exercising high levels of directive leadership. This finding by itself advances previous research findings which asserted that female leaders would be ‘back-lashed’ when engaging in directive leadership style (Eagly & Karau, 2002; Ridgeway, 2004; Rudman & Glick, 2001; Rudman et al., 2012). In fact, the findings indicate that female leaders would at least be considered as prototypical as male leaders when engaging in directive leadership, particularly because being assertive in organizational leadership positions communicates a prototypical

Table 6.3

Summary of Conditional Indirect Effect of Leader Gender on Leadership Effectiveness via Leadership Group Prototypicality at +/- 1 & 2SD of Participative and Directive Leadership

Moderators	
<u>Directive Leadership</u>	<u>Leadership Effectiveness</u>
Low (-2SD)	-.24 (.12)*
Low (-1SD)	-.15 (.08)*
Mean	-.06 (.07)
High (+1SD)	.03 (-.14)
High (+2SD)	.12 (.14)
<u>Participative Leadership</u>	<u>Leadership Effectiveness</u>
Low (-2SD)	-.12 (.12)
Low (-1SD)	-.08 (.08)
Mean	-.05 (.07)
High (+1SD)	-.02 (.1)
High (+2SD)	.00 (.14)

Note. Standard errors are in parantheses. Significance levels are *p* - scores set at 95% and unstandardized path coefficients are reported.

Table 6.4

Summary of Conditional Indirect Effect of Leader Gender on Leadership Effectiveness via Leadership Group Prototypicality at Follower Gender and at +/- 1 & 2SD of Directive and Participative Leadership

Moderators		
<u>Follower Gender</u>	<u>Directive Leadership</u>	<u>Leadership Effectiveness</u>
Male	Low (-2SD)	-.4 (.19)*
Female	Low (-2SD)	-.13 (.29)
Male	Low (-1SD)	-.21 (.11)*
Female	Low (-1SD)	-.14 (.12)
Male	Mean	-.02 (.08)
Female	Mean	-.14 (.09)
Male	High (+1SD)	.17 (.12)
Female	High (+1SD)	-.14 (.16)
Male	High (+2SD)	.36 (.2)*
Female	High (+2SD)	-.15 (.25)
<u>Follower Gender</u>	<u>Participative Leadership</u>	<u>Leadership Effectiveness</u>
Male	Low (-2SD)	-.28 (.23)
Female	Low (-2SD)	-.02 (.2)
Male	Low (-1SD)	-.13 (.13)
Female	Low (-1SD)	-.08 (.12)
Male	Mean	.01 (.08)
Female	Mean	-.14 (.09)
Male	High (+1SD)	.15 (.15)
Female	High (+1SD)	-.21 (.14)
Male	High (+2SD)	.29 (.25)
Female	High (+2SD)	-.27 (.23)

Note . Standard errors are in parentheses. Significance levels are *p*-scores set at 95% and unstandardized path coefficients are reported.

leadership style which gives female leaders leverage to be representative of the group (Brescoll et al., 2012; Ellemers et al., 2012).

The findings could be taken to suggest that female leaders did not benefit from the perceptual bias accrued for them under the expectancy violations theory (Jussim et al., 1987), had they did, they would have received better ratings on leadership group prototypicality than their male counterparts. However, although female leaders engaging in high levels of directive leadership were not regarded as more prototypical than male leaders, their evaluations of leadership group prototypicality suffered when they behaved in line with their gender stereotype, i.e., engaging in low levels of directive leadership. As females are expected to assume the leadership role and engage in suitable leadership behavior such as directive leadership, they were more harshly punished than male leaders when they did not. This finding is in line with

expectancy violations theory and other research that shows how female leaders are subject to more scrutiny and harsher evaluations than male leaders (Eagly et al., 1992; Heilman & Chen, 2005; Heilman & Haynes, 2005). Female leaders are often found in a lose-lose situation where, on one hand, exercising communal leadership style or engaging in low levels of agentic behavior such as directive leadership reemphasizes stereotypes that females are not fit to lead (Eagly & Carli, 2015; Eagly & Karau, 2002). On the other hand, exercising directive leadership suggests a violation of the female stereotype (Ellemers et al., 2012; Heilman, 2012). My findings suggest that to be considered prototypical, female leaders have to engage in directive leadership as that not only represents the prototypical leadership behavior required in business settings (Heilman, 2001; Koenig et al., 2011) but also not engaging in directive leadership incurs less favorable evaluations.

In line with the above findings, results showed that while leadership group prototypicality did not mediate the interaction between leader gender and high levels of directive leadership on leadership effectiveness, results showed that the mediation effect was negative when female leaders as opposed to male leaders engaged in low levels of directive leadership. Those results further assert that engaging in low levels of directive leadership is detrimental for female leaders.

Moreover, the results of the 3-way interaction further assert that female leaders who exercise directive leadership are perceived more prototypical than male leaders particularly when leading male followers. Contrary to previous research which posited that male followers more harshly scrutinize female leaders especially when the latter violate their stereotypically-accepted leadership behavior (Eagly & Johnson, 1990; Eagly et al., 1992), my findings reveal the opposite and thus point to a new direction guided by the SITL (van Knippenberg & Hogg, 2003), expectancy violations theory (Jussim et al., 1987), and the uncertainty reduction hypothesis (Chattopadhyay et al., 2011; Hogg & Mullin, 1999; Reid & Hogg, 2005) in looking at the effectiveness of female leaders. In the female leader – male follower relationship, follower uncertainty is likely to be manifest in the form of norm and instrumental uncertainty. Under such

heightened levels of uncertainty, followers yearn for a leader who prescribes, rather than consults, on group norms and behavior (Rast et al., 2012, 2013). Evidently, male followers in my study perceived the female leader as being prototypical of the group the more she engaged in directive leadership. Interestingly, as the levels of directive leadership exercised by the female leader dropped, male followers' perceptions of the female's leadership group prototypicality dropped which further bolsters my argument. In addition, behaving counter-stereotypically in a leadership role (i.e., a female leader engaging in directive leadership) is likely to have a stronger impact on male followers who endorse gender stereotypes more than female followers (Brescoll et al., 2012; Eagly et al., 1992; Koenig et al., 2011). Thus, male followers would hold more perceptual bias in favor of a female leader engaging in directive leadership and will evaluate her more favorably (Jussim et al., 1987; Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010). This is precisely what the results reveal.

The relationship though between female followers and female leaders was starkly different to that with male followers. The pattern of the results do not divert from research on how female followers evaluate leaders per se, and female leaders in particular. As found by other researchers (Brescoll et al., 2012; Eagly et al., 1992), female leaders did not exhibit a preference for either leadership style and results did not show an inclination towards either of the leader genders. My results thus indicate that the evaluation of female leaders hinges on the perception of male followers who seem to be more likely to hold stereotypes and prejudice against female leaders (Brescoll et al., 2012; Eagly et al., 1992).

Furthermore, my results also indicate that the interaction between leader gender, leadership styles, and follower gender influences perceptions of leadership effectiveness via leadership group prototypicality such that female leaders exercising directive leadership are perceived to be more effective than male leaders particularly by their male followers. In line with the SITL, male leaders are more likely to consider a female leader prototypical when the latter engages in directive leadership. This not only attenuates uncertainty but also paves the way for

males to endorse the female leaders (Hogg & Terry, 2000). The fact that I did not find significant results for the female follower suggests two things: Firstly, as in Study 1, although female followers do not exhibit a preference for either a male or a female leader, a different leadership style might be more suitable to attenuate follower uncertainty (Chattopadhyay et al., 2011). Secondly, it could well be that female followers do not experience uncertainty when reporting to a female leader thus challenging the assumptions put forth by the status characteristics theory and the SIT in that females hold the low status attributions ascribed to them and prefer to associate with other males in order to enhance their self-esteem and positive image (Chattopadhyay, George, et al., 2004; Ridgeway, 2004; Tajfel & Turner, 1986). In fact, other trends of research have found that female leaders are much less threatened than their male counterparts when reporting to a female leader in a gender-incongruent role (Brescoll et al., 2012).

In addition, in line with the results of Study 1, the field study also did not find significant moderated mediation effects for leadership group prototypicality when either of the leaders engage in participative leadership. In line with previous research, participants showed a preference towards participative leadership regardless of leader gender (DeRue et al., 2011; Judge et al., 2004). Several reasons could explain why male leaders who engaged in participative leadership were not considered more prototypical than female leaders using the same leadership style – as previous research indicates (Heilman & Chen, 2005; Jussim et al., 1987; Subašić et al., 2011). For starters, as in Study 1, participants in the field study are predominantly college graduates who are likely to have decreased gender stereotypes (Powell et al., 2002) and adopt a more contemporary view on leadership that includes agentic and communal characteristics (Koenig et al., 2011). In this regard, when a male engages in participative leadership, his behavior is not considered ‘atypical’ but is rather normalized. As such, he does not benefit from any perceptual bias that plays to his favor. Secondly, it could well be that when evaluating leadership effectiveness, participants are more concerned with agency as that stipulates leadership characteristics more than communal behavior (Cejka & Eagly, 1999; Eagly & Carli, 2003; Eagly

& Karau, 2002). As such, it is worth considering whether participative leadership style is conducive to drive perceptions of leadership group prototypicality. Additionally, it could well be that both male and female leaders are considered prototypical under participative leadership. Further research should consider investigating this issue in more depth along with considering different leadership styles.

Moreover, one of my main key findings supports the conceptual model in that it is not the similarity to the leader that drives leadership effectiveness as depicted in the dissimilarity literature (Tsui & O'Reilly, 1989) nor is it the extent to which leader gender fits the leadership role (Eagly & Karau, 2002; Heilman, 2001; Rudman & Glick, 2001). Rather it is the perception of leader prototypicality which is a function of the interaction between leader gender, leadership styles, and follower gender. My results show that leader prototypicality mediates the path from leader gender to perceptions of leadership effectiveness. This in turn is believed to lead to positive work performance (see Hogan et al., 1994).

6.2.1 Theoretical Contributions

Three key theoretical contributions can be derived from the findings of Study 3. Firstly, I diverted research away from the inconclusive findings of the relational demography literature (Tsui & O'Reilly, 1989) and from the scope of the role congruity theory and other related stereotype fit theories (Eagly & Karau, 2002; Heilman, 2001; Rudman & Glick, 2001) and validated a conceptual model grounded in the SITL, the expectancy violations theory, and the uncertainty reduction hypothesis (Hogg et al., 2012). The conceptual framework was able to explain the effectiveness of female leaders above and beyond the formerly mentioned theories. Specifically, the model asserted that, in order to be considered effective, female leaders need to engage in prototypical leadership behavior. And while previous research showed that female leaders are backlashed when resorting to agentic leadership behavior (Cejka & Eagly, 1999; Rudman et al., 2012), I found, in line with recent findings (see Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010), that engaging in directive leadership renders the female leader

prototypical of the group, particularly by her male subordinates. In that light, the SITL offers a promising way forward in accounting for how and when female leaders are endorsed.

The second key contribution lies in the further development of the SITL. While leadership group prototypicality has extensively been studied as a moderator (e.g., De Cremer, van Dijke, & Mayer, 2010; Lipponene, Koivisto, & E, 2005; van Knippenberg & van Knippenberg, 2005), merely two studies have looked at leadership group prototypicality as a mediator (e.g., Rast et al., 2013; Yoshida et al., 2013). My model adds to the research exploring leadership group prototypicality as the mechanism that leads to leadership effectiveness. Moreover, this study lends further support to Rast and colleagues (2012; 2013) and extends their work in exploring how directive leadership is best suited to attenuate the uncertainty of followers with a female leader. While Rast and colleagues exploring the effect of self-uncertainty, this study looked at how leader gender interacts with leadership style and follower gender to attenuate the effects of norm and instrumental uncertainty. In addition, the study adds to the plethora of research that looked at how contingency factors influence leadership group prototypicality (e.g., Cicero et al., 2007; Giessner & van Knippenberg, 2008; Pierro et al., 2005) and adds to the research of Hogg and colleagues (2006) in exploring the roles of gender and leadership styles in influencing perceptions of leadership group prototypicality. To our knowledge, this is the first study that looked at how participative and directive leadership styles affect leadership group prototypicality.

Thirdly, the fact that the model received support in both an experimental and a field setting contributes to the external and internal validity of the results (Bryman & Bell, 2015). Thus, the presented mechanism by which female leaders who engage in directive leadership are rendered effective through leadership group prototypicality can be generalized to other situations and to other samples.

6.2.2 Practical Contributions

The findings of the field study further validate the results from Study 1 and in that, provide practitioners with tools on how to equip female leaders to better thrive in their leadership roles. Specifically, practitioners are advised to train their female leaders on using agentic leadership behaviors and to make sure that such leadership styles are used with male followers as opposed to female followers. With that, it is recommended that organizations give female leaders leverage to exercise different leadership styles with her subordinates where one of which has to be directive leadership at least with her male followers. In order for females to thrive in their roles as leaders, organizations should also support females from any backlash that they might be subject to, not necessarily from their subordinates, because of their agentic behavior. As such, practitioners should be well aware that directive leadership is better suited for female leader than for male leaders who do not appear prototypical nor do they drive leadership effectiveness under such leadership style. With that being established, organizations should set systems in place where they do not compare, ‘apple-to-apple’, the leadership styles of male and female leaders – lest in current times where males are still likely to hold stereotypical beliefs about female leaders.

Furthermore, the findings of the study provide solid evidence for practitioners seeking to enhance the relationship between their gender-diverse workforce that it is not similarity per se that drives leadership effectiveness, rather, practitioners should make sure that leaders engage in prototypical behavior that renders them prototypical of the group. This in turn will lead to positive outcomes such as a positive relationship between leaders and members and good perceptions of leadership effectiveness.

6.2.3 Limitations and Avenues for Future Research

Although this study contributes to our understanding of how and when female leaders are effective, some limitations have to be acknowledged. Firstly, all of the variables were collected in one questionnaire and at the same time. However, it is worth noting that the independent variable (leader gender) and one of the moderators (follower gender) are demographic variables which

lowers the risk of common source variance compared to an analysis that includes all continuous variables. In addition, when looking at interactive effects as is the case with my analyses, common source variance has been shown to be less of a problem as it does not account for interactions obtained in regression analyses but rather results in an undervaluation of the strength of such effects (McClelland & Judd, 1993). Nevertheless, the mediator and outcome measure were both rated by followers and thus suffer from common rater effect (Podsakoff et al., 2003). Future research should measure those variables at different points in time and with different raters.

While this study is one of the first to look at the effectiveness of female leaders under the SITL lens (Hogg et al., 2006; Wells & Aicher, 2013), future research should explore how different leadership styles, other than directive and participative, affect how prototypical female leaders are perceived. It would be particularly interesting to explore how highly communal leadership behavior, such as servant leadership (Greenleaf, 1996) would affect the prototypicality and thus the effectiveness of female leaders.

Furthermore, future research should also explore what other contingency factors that would render female leaders prototypical per se. It would be interesting to see under what conditions female leaders can ‘just be themselves’, be it engaging in agentic and/or communal leadership, and be accepted in their leadership roles. In that respect, different leadership theories such as authentic leadership (Avolio & Gardner, 2005) are recommended to be explored.

In addition, future research should also look at the analysis at the group level and explore how the group composition will influence what the prototypical behavior of the group is and consequently, what leadership behavior the female leader needs to engage in to be considered prototypical.

Finally, it would also be recommended to explore the conceptual model under different demographic attributes. While I theorized on the effectiveness of female leaders, the theoretical framework can be extended to other minority groups or ‘less prototypical’ leaders such as leaders

of different ethnicities, sexual orientation, and nationalities. Furthermore, the model can also be extended to explore deep level dissimilarities such as differences in values, beliefs, and attitudes.

6.4 CONCLUSION

In this study, I sought to externally validate my conceptual model that is grounded in the SITL and which explored how and when female leaders exhibit leadership effectiveness in organizational leadership roles. The field study results further assert that the path between leader gender and leadership effectiveness is mediated by leadership group prototypicality. The findings are largely in line with Study 1 and thus support my predictions.

CHAPTER 7: DISCUSSION AND CONCLUSION

CHAPTER SUMMARY

This final chapter provides a general discussion that integrates the findings from the conducted three studies on the effectiveness of female leaders. The chapter starts by presenting an overall summary of the findings which is then followed by theoretical and practical implications. I then present the strengths and limitations of the studies and follow those with avenues for future research, before providing overall conclusions.

7.1 SUMMARY OF STUDY FINDINGS

Guided by a review of the literature on gender and leadership, this thesis aimed to developed a framework to explain how and under what conditions female leaders drive leadership effectiveness. Based on the SITL (Hogg & Terry, 2000; Hogg et al., 2012; van Knippenberg & Hogg, 2003), expectancy violations theory (Jussim et al., 1987), and the uncertainty reduction motive (Chattopadhyay et al., 2011; Hogg & Mullin, 1999), I developed a framework linking leader gender to leadership effectiveness via leadership group prototypicality which I hypothesized to be a product of the interaction between leader gender, leadership styles (directive versus participative), and follower gender.

A summary of the results of the three studies is displayed in Table 7.1. The results of the first experimental study which utilized a video vignette to simulate a leader-follower interaction largely supported the hypotheses for female leaders. Moderated mediation analyses showed that in comparison to male leaders, female leaders are better able to drive perceptions of leadership effectiveness through leadership group prototypicality but only under certain conditions. Specifically, female leaders were regarded more prototypical and ultimately more effective than male leaders when they engaged in directive leadership style. This effect was particularly pronounced for male followers. These results are in line with the expectancy violations theory (Jussim et al., 1987) and with the postulations of the uncertainty reduction motive of the SITL

and its application to demographic differences between leaders and followers (Chattopadhyay et al., 2011; Hogg & Terry, 2000; see Rast et al., 2013). Conversely, results do not reveal significant differences on leadership effectiveness via leadership group prototypicality between male and female leaders engaging in participative leadership.

A second experiment was conducted with the aim of replicating the findings of Study 1; however, hypotheses were not supported. The second study utilized the same script as Study 1 but participants were presented with a paper scenario rather than a video vignette. The change in methodology posed different cognitive and motivational load on participants who were not able to derive perceptions of leadership group prototypicality because of the limited information cues from the paper scenario (Aguinis & Bradley, 2014; Hughes & Huby, 2002; Pratto & Bargh, 1991; Tosi & Einbender, 1985). The paper vignette rendered leader gender highly salient and pervasive which in turn masked other information regarding the leader's behaviour and paved the way for stereotypes and prejudices to manifest (see Tosi & Einbender, 1985). In light of those reasons, post hoc analyses revealed results in line with the role congruity theory (Eagly & Karau, 2002): Male leaders were rated as more effective in stereotypically-male leadership roles such as the one depicted in the study, that male followers preferred male leaders over female leaders, and that female followers did not exhibit preferences for either of leader gender (Eagly et al., 1995, 1992; Eagly & Karau, 2002). Nevertheless, findings of Study 2 were also in line with the SITL: For leadership group prototypicality to be established, individuals need to gather sufficient information about the leader in addition to having time to process the information to decide whether the leader represents the prototype of the group (Hogg et al., 2012).

Finally, using data from 126 employees working in services organisations in Lebanon and Germany, I replicated the findings from Study 1. As in Study 1, the moderated mediation hypotheses linking leader gender to leadership effectiveness through leadership group prototypicality which is a function of the interaction between leader gender, leadership styles, and follower gender were largely supported. Female leaders were considered more prototypical and

thus effective than male leaders the more they engaged in directive leadership and this was particularly pronounced for their male followers. In line with Study 1, I did not find support for the moderated mediation hypotheses under participative leadership nor did I find conditions under which a male leader is rendered more effective.

7.2 INTEGRATION OF FINDINGS

The results of the three studies reveal that it is not the similarity of the leader *per se* that drives leadership effectiveness (cf. relational demography, Tsui & O'Reilly, 1989) nor is it the extent to which the leadership role matches the gender of the leader (cf. role congruity theory, Eagly & Karau, 2002), rather leadership effectiveness hinges on the extent to which the leader is considered prototypical of the group (Hogg et al., 2012; van Knippenberg & Hogg, 2003). I found that for female leaders to be considered at least as prototypical as their male counterparts (Study 3) and even more prototypical than male leaders (Study 1), they need to resort to an organisationally prototypical leadership behaviour; directive leadership style. Taking this a step further, I established that female leaders are able to drive leadership effectiveness through prototypicality when they exercise high levels of directive leadership particularly with their male followers (Study 1 & Study 3). On the other hand, I found that directive leadership is not as conducive when female leaders lead female followers (Study 1 & Study 3).

Although my findings seem to suggest that engaging in directive leadership is likely to help females be regarded as more effective in leadership roles, it is important to note that this 'help' is supported theoretically via a) expectancy violations biases that portray female leaders as more prototypical and ultimately more effective than men who engage in the same behavior (see Lanaj & Hollenbeck, 2015); and b) the uncertainty reduction hypothesis whereby females are

Table 7.1

Summary Results Across the 3 Studies

	Hypotheses	Study 1	Study 2	Study 3
Hypothesis 1a	Female leaders who engage in a directive leadership style will be perceived as more prototypical than male leaders who engage in a directive leadership style	Supported	Not supported	Partially supported
Hypothesis 1b	Male leaders who engage in a participative leadership style will be perceived as more prototypical than female leaders who engage in a participative leadership style	Not supported	Not supported	Not supported
Hypothesis 2	The relationship between leader gender and leadership group prototypicality is contingent on leadership style and follower gender	Not supported	Not supported	Supported
Hypothesis 2a	Female leaders will be perceived to be more prototypical than male leaders when they exercise directive leadership; this effect will be further strengthened when followers are male rather than female	Supported	Not supported	Supported
Hypothesis 2b	Male leaders will be perceived to be more prototypical than female leaders when they exercise participative leadership; this effect will be further strengthened when followers are male rather than female	Not Supported	Not supported	Not Supported
Hypothesis 3a & 4a	Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is female compared to male and engages in directive leadership; (4a) the positive effect will be further strengthened for male rather than for female followers	3(a) supported; 4(a) supported	Not supported	3(a) partially supported; 4(a) supported
Hypothesis 3b & 4b	Leadership group prototypicality will mediate the relationship between leader gender and leadership effectiveness such that the effect will be positive when the leader is male compared to female and engages in directive leadership; (4b) the positive effect will be further strengthened for male rather than for female followers	3(b) not supported; 4(b) not supported	Not supported	3(b) not supported; 4(b) not supported

compelled to attenuate the instrumental and (norm) uncertainty evoked in their followers through using directive leadership (Chattopadhyay et al., 2011). Therefore, engaging in directive leadership is not the ultimate solution for the effectiveness of female leaders. In line with Lanaj and Hollenbeck (2015), a more lasting solution would be for gender stereotypes to change and for leadership to be conceptualized in a more inclusive manner. Until stereotypes change, the findings in this study offer female leaders a way forward in being considered effective leaders.

Furthermore, although participants preferred being led by a participative leadership style which is in line with research on leadership (DeRue et al., 2011; Judge et al., 2004), this leadership behaviour was not able to predict perceptions of leadership group prototypicality and thus the moderated mediation hypotheses under participative leadership were not significant (Study 1 & Study 3). Results of Study 1 and Study 3 did not find conditions under which male leaders are considered more prototypical than female leaders.

Contrary to Study 1 and Study 3 where participants either observed a leader interact with a colleague via a video vignette (Study 1) or worked alongside a leader in a field setting (Study 3), Study 2 utilized paper scenarios that posed challenges for participants to derive perceptions of leadership group prototypicality. The nature of Study 2 rendered leader gender salient and under limited information cues and enough time to process the scenario, participants resorted to leader prototypes (Lord & Hall, 2003; Lord & Maher, 1991) rather than group prototypes as evident in Study 1 & Study 3.

7.3 THEORETICAL IMPLICATIONS

As I address the research gaps outlined in Chapter 1 and 2, I make significant theoretical contributions in this thesis that advance the gender and leadership literature and the SITL in several ways.

Firstly, I address the theoretical and empirical shortcomings of the relational demography literature (Tsui & O'Reilly, 1989; Vecchio & Brazil, 2007) which predominantly advocates that

gender similarity between leaders and followers drives positive work outcomes. I rather argue and find support, under the SITL, that it is not similarity per se that drives leadership effectiveness, it is the extent to which leaders are considered prototypical of the group (embodying the group norms, attitudes, and beliefs) (Hogg et al., 2012; van Knippenberg & Hogg, 2003). By doing so, the focus is shifted from matching leader and follower gender to attain leadership effectiveness to establishing the prototypicality of the leader which is contingent on the leader's behaviour and characteristics of their followers.

In addition, I addressed another theoretical shortcoming in the relational demography literature that predominantly grounded the analysis in the self-enhancement motive of the SIT and the SCT (e.g., Loi & Ngo, 2009; Tsui & O'Reilly, 1989; Vecchio & Bullis, 2001). Alternatively, I considered the uncertainty reduction motive (Hogg & Mullin, 1999; Reid & Hogg, 2005; Reynolds et al., 2003) to be the main driver underlying followers' preference for a leader's behaviour. Based on the application of uncertainty to relational demography (Chattopadhyay et al., 2011), I postulated that leader gender impacts on the uncertainty exhibited by the followers. I consequently showed, in line with previous research (Rast et al., 2013; Rast, 2015), that followers opt for a clear and directive behaviour from their leader under heightened levels of uncertainty.

Thirdly, I shift focus in this thesis from examining the effectiveness of female leaders from the lens of the role congruity theory (Eagly & Karau, 2002) and related stereotype fit theories (Heilman, 1983; Rudman & Glick, 1999) to the SITL. In doing so, core assumptions that dominated the gender and leadership research are challenged, namely that the effectiveness of female leaders is contingent on the extent to which their gender role fits with the requirements of the leadership role (Eagly & Karau, 2002). Instead, I showed that the effectiveness of female leaders hinges on the extent to which they are considered prototypical of their groups. Through the conceptual framework and building on the expectancy violations theory (Jussim et al., 1987), I further refuted another core tenet of the role congruity theory and revealed how engaging in a

counter-stereotypical behaviour (agentic for female leaders) such as directive leadership is in fact adaptive for female leaders and not detrimental for their effectiveness (Amanatullah & Tinsley, 2013; Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010). Rather, female leaders benefit from a perceptual bias when they engage in directive leadership and this leadership style renders them at least as prototypical as male leaders (Study 3) or even more prototypical than male leaders (Study 1) who engage in equivalent behaviour.

Additionally, I also addressed another gap in the role congruity theory – namely that female leaders have to engage in a leadership style combining both agentic and communal characteristics to be considered effective (Eagly & Karau, 2002) and showed that agentic leadership behaviour is sufficient to drive leadership effectiveness. Furthermore, as the role congruity theory does not offer further contingency factors that would render females accepted in leadership positions, I provided boundary conditions that females can consider to be endorsed.

Moreover, a further core assumption underlying the role congruity theory was refuted in this thesis. Male leaders engaging in neither directive nor participative leadership were considered more prototypical and thus more effective than female leaders (cf. Eagly & Karau, 2002). I predicted based on the expectancy violations theory and previous research on the SITL (see Subašić et al., 2011) that male leaders would be considered more prototypical than female leaders when they resort to counter-stereotypical behaviour such as participative leadership; however, results were not significant. This finding can be taken to suggest a decrease in gender stereotypes, at least with the samples in Study 1 and Study where participants interacted with a leader. This might signal the adoption of a more contemporary view of leadership that encompasses agentic and communal characteristics (Koenig et al., 2011). As such, male leaders who engage in participative leadership are not seen as deviating from the norm and thus would not benefit from perceptual biases (cf. Heilman & Chen, 2005). A further in-depth investigation is warranted in future research.

Fourthly, I proposed and tested a conceptual framework guided by the SITL (van Knippenberg & Hogg, 2003), expectancy violations theory (Jussim et al., 1987), and the uncertainty reduction hypothesis (Chattopadhyay et al., 2011; Hogg & Mullin, 1999; Reid & Hogg, 2005) and provided empirical evidence of the underlying mechanism that drives the effectiveness of female leaders. Specifically, I demonstrated that female leaders drive leadership effectiveness through being perceived prototypical of the group (van Knippenberg & Hogg, 2003). The empirical results (Study 1 & Study 3 versus Study 2) further showed that providing followers with sufficient information regarding who the leader is and how the leader behaves and giving them enough time to process this information is crucial to construct a clear prototype of the leader. Through Studies 1 and 3, I demonstrated that once female leaders are considered prototypical (through engaging in directive leadership), they were able to drive perceptions of leadership effectiveness. In doing so, I contributed to the gender and leadership literature by proposing an alternative framework under which the effectiveness of female leaders is studied. I further contributed to the growing SITL literature by examining prototypicality as a mediator (e.g., Rast et al., 2013; Yoshida et al., 2013) as opposed to a moderator (e.g., Cicero et al., 2007; Giessner & van Knippenberg, 2008).

I also provided empirical support of a moderated model concerning the effect of leader gender. Through Studies 1 and 3, I consistently showed that the extent to which female leaders are considered prototypical, and thus effective, hinges on the leadership style that they adopt and the gender of their followers. In doing so, I extended research on the SITL and considered an additional set of behaviour that an originally non-prototypical leader needs to engage in in order to be endorsed (e.g., Giessner & van Knippenberg, 2008; Platow et al., 2006; Platow & van Knippenberg, 2001; van Knippenberg & van Knippenberg, 2005). Specifically, I posited that for female leaders to be considered prototypical in an organisational leadership role that is stereotypically-male (Koenig et al., 2011; Powell, 2012), they will have to engage in a prototypical leadership style, ideally directive leadership behaviour. This postulation came in

refutation of the previous theoretical frameworks in this area (cf. role congruity theory, Eagly & Karau, 2002; backlash effect, Rudman & Glick, 1998). Building on the expectancy violations theory (Jussim et al., 1987; Lanaj & Hollenbeck, 2015), I provided evidence that makes clear that female leaders have to engage in directive leadership behaviour to drive leadership effectiveness, particularly with their male followers who are more likely to hold stereotypes and prejudice against female leaders (Brescoll et al., 2012; Eagly et al., 1992). I showed that behaving counter-stereotypically in a leadership role (i.e., a female leader engaging in directive leadership) will have a stronger effect on male followers who hold gender stereotypical views more than female followers (Brescoll et al., 2012; Eagly et al., 1992; Koenig et al., 2011) and would ultimately have more perceptual bias in favor of a female leader engaging in directive leadership. This will lead to the female leader being evaluated more favorably (Jussim et al., 1987; Lanaj & Hollenbeck, 2015; Rosette & Tost, 2010).

Moreover, I built on the growing literature examining the uncertainty reduction motive of the SIT, particularly in the SITL (Hogg & Mullin, 1999; Hogg & Terry, 2000; Rast et al., 2012; Rast, 2015). I extended previous research that looked at different manifestations of uncertainty (Cicero et al., 2009; Pierro et al., 2005; Rast et al., 2013) and considered how leader gender would instigate varying feelings of uncertainty in their followers (Chattopadhyay et al., 2011). By integrating the work of Chattopadhyay et al. (2011) into the model, I hypothesized that female leaders are more prone than male leaders to instil norm and instrumental uncertainty in their followers; particularly for male followers. It was argued that those feelings will be attenuated when the female leader provides structural clarity through directive leadership. I tested those assumptions and found empirical support (Study 1 & Study 3) that extends the research on the uncertainty reduction motive.

In light of the uncertainty reduction motive, I also extended the work of Rast and colleagues (2012, 2013) which showed how non-prototypical leaders can gain support under

heightened levels of uncertainty particularly when they engage in autocratic leadership. I found support for this in studies 1 and 3. As female leaders instigate feelings of uncertainty in their followers, engaging in a directive leadership style is not only adaptive because it is the 'prototypical' leadership behaviour, but also because it serves to attenuate the uncertainty exhibited by their followers.

In addition, while I also attempted to explain the effectiveness of male leaders under the moderated mediation model, I did not find support for my hypotheses. Male leaders were not considered to be more effective than female leaders through using either directive or participative leadership style. Moreover, the moderated mediation model linking leader gender to leadership effectiveness via leadership group prototypicality was not significant under participative leadership. Two potential reasons could account for the insignificant findings. Firstly, it could well be that since participants were predominantly college graduates, they would have decreased gender stereotypes and thus endorse a more encompassing view of leadership (Koenig et al., 2011; Powell et al., 2002). Under such a pretense, a leader engaging in participative leadership is not considered atypical which explains why participants equally favored a male or a female leader using this leadership style. However, the moderated mediation hypothesis under participative leadership was not significant suggesting that participants could be more concerned with agency when it comes to evaluating leadership effectiveness as that more strongly identifies leadership characteristics more than communal behavior (Cejka & Eagly, 1999; Eagly & Carli, 2003; Eagly & Karau, 2002). It is thus worth considering whether participative leadership style can drive perceptions of leadership group prototypicality. Future research should consider investigating this issue in more depth.

This thesis further contributed to the SITL and extended the work of Hogg and colleagues (2006) in looking at the impact of demographic characteristics on perceptions of leadership group prototypicality. Although it was posited that demographic characteristics per se do not influence

leadership group prototypicality (van Knippenberg, 2011), it was rather emphasised that it is the behaviour of the leader that is more crucial. In doing so, I found support that female leaders in stereotypically-male leadership roles are better off engaging in prototypically-male leadership behaviour in order to be effective.

Finally, the successful replication of the model across an experiment and a field study contributes to the external and internal validity of the results (Bryman & Bell, 2015). The fact that support for the model was established in a field setting increases the robustness of the findings (Maner, 2016). Therefore, I presented in this thesis a conceptual framework that explained how engaging in a directive leadership style would render female leaders more prototypical and thus more effective in their organisational leadership roles and the findings are likely to be generalizable across different situations and samples.

7.4 PRACTICAL CONTRIBUTIONS

Apart from the theoretical contributions advanced in this thesis, the studies address the practical implications highlighted in Chapter 1 and offer valuable insights to practitioners aiming to support and enhance the effectiveness of female leaders.

Although stereotypes regarding females in leadership positions are on the decrease (Powell et al., 2002), leadership positions are still mainly regarded as a male prerogative (Koenig et al., 2011). In this light, the first contribution to practitioners is offering female leaders a framework of behavior to engage in, particularly with their male followers. As the results of the studies indicate that to be effective some female leaders might be urged to deviate from their typical authentic leadership behavior, I provide strong empirical support that female leaders are better able to foster leadership effectiveness when they engage in agentic leadership behavior, such as directive leadership. While an ideal solution would be for gender stereotypes to change and for leadership to be conceptualized in a more inclusive manner, this solution is not ideal, it is one of many steps required to advance the leadership positions of female leaders.

Secondly, the results of my studies bear good news to organizations: The findings demonstrate that the backlash effect against female leaders exercising agentic leadership behavior (Eagly et al., 1995; Ridgeway, 2001; Rudman & Glick, 1999) is on the decrease. Rather, I find that, at least when compared to their male counterparts, female leaders are better endorsed when they engage in directive leadership behavior, mainly because they benefit from perceptual bias that works in their favor. Thus, practitioners are now made aware that previously considered detrimental behavior for female leaders is now titled towards being adaptive. Practitioners are thus prompted to support female leaders who resort to directive behavior by ensuring a safe and supportive environment that is free from backlash from peers and/or management.

The results also present implications for practitioners tasked with evaluating the performance of female leaders. As I provided a new lens to assess the effectiveness of female leaders, managers and raters are thus compelled to better comprehend and favorably rate the performance of female leaders should they resort to agentic leadership behavior. Extending this contribution further, the results could also inform training programs to prepare females to take on leadership roles and to ensure systems are in place that limit the effect of bias against them, particularly as they engage in directive leadership.

Thirdly, I provide important insights to practitioners seeking to build leader-member teams. This thesis demonstrates that it is not the gender similarity to the leader that is crucial to drive leadership effectiveness. Hence, organizations do not need to ensure that leaders and their followers exhibit a specific gender combination. Furthermore, I provide support to the notion that organizations can appoint females in organizational leadership roles that are predominantly male while resting assured that they will be able to drive leadership effectiveness. What practitioners are offered is the finding that it is neither gender similarity between the leader and their followers nor the fit between the leadership role and the gender role that is crucial for leadership effectiveness. It is rather being perceived as prototypical, i.e. embodying the norms of the group that is most important. Thus, I bring to the forefront the criticality of the leader's behavior above

the leader's gender and the match between the gender of the leader and that of the follower. As I find support for the effectiveness of female leaders when engaging in directive leadership, practitioners are encouraged to train and ensure that their female leaders engage in the right leadership style; directive leadership.

Furthermore, the studies also provide guidelines for practitioners to not only train female leaders on agentic leadership behaviors but to also prompt them to be selective in their exercise of directive leadership. It is evident from the findings that directive leadership is particularly adaptive with male followers but is not recommended when the female leader is dealing with female followers. In addition, organizations should encourage their male leaders not to engage in agentic leadership behavior as that proved to be detrimental for driving perceptions of prototypicality and subsequent leadership effectiveness.

Stemming from the notion of ensuring that participants perceive the leader as prototypical of the group, practitioners are advised to allow sufficient interaction time between leaders and followers and to ensure enough information about the leader is communicated to followers as that paves the way to establish leadership group prototypicality. This proves to be crucial for followers to establish perceptions of norm-like behavior and to solicit information about the leader that they are acting for the welfare of the group. Practitioners should then ensure that followers are given the right platform to interact with their leaders to derive leadership group prototypicality. Once perceptions of leadership group prototypicality form, they will overshadow the negative impact of stereotypical attributions directed against female leaders.

7.5 LIMITATIONS AND AVENUES FOR FUTURE RESEARCH

A strength in this thesis lies in its utilization of different study designs (experiments and a field study) to establish both internal and external validity (Bryman, 2012; Shadish et al., 2002). Particularly, studies 1 and 2 were experimental designs aimed to detect the nature and direction of causal relationships which enables the understanding of the underlying mechanisms through having considerable control over study variables that rules out alternative explanations (Aguinis

& Bradley, 2014; Shrout & Bolger, 2002). Both of the experiments had a large sample size (at least 14 participants per cell) that is required for statistical power (van Voorhis & Morgan, 2007). Thus, the inferences from Study 1 and Study 2 can confidently be attributed to the interrelations among our study variables rather than to the possibility of a Type 1 or Type 2 error. Furthermore, experimental vignette methodology was employed in studies 1 and 2 which advances experimental realism through presenting participants with well-constructed scenarios all the while allowing researchers to manipulate variables (Aguinis & Bradley, 2014; Atzmuller & Steiner, 2010). In particular, and to increase experimental realism and instill participants to immerse themselves in the situation, I opted for video vignettes in Study 1 (Aguinis & Bradley, 2014; Hughes & Huby, 2002). As support was found for our conceptual framework in the first experiment, I sought to triangulate the results (Scandura & Williams, 2000) and replicate the findings (Maner, 2016; Yong, 2012) through conducting Study 2 whereby the means of display of information was altered (paper scenario versus a video vignette). Although I did not find support for the hypothesized relationships in Study 2, the findings offered stronger grounds to test the model in a field study whereby the objective was not only to gain external validity but also to showcase that prototypicality is manifest with prolonged leader-follower interaction.

The fact that I was not able to replicate the results of Study 1 in my second experimental study warrants a call for conducting future research whereby a similar manipulation means is utilized (Yong, 2012). The video vignettes employed in Study 1 are likely to have carried more informational cues (participants observed the leader interact with a colleague of the same gender as them) in terms of non-verbal behavior that instigated participants to form perceptions of leadership group prototypicality (Hughes & Huby, 2002). On the other hand, the paper vignettes only displayed the gender of the leader in terms of their name and picture and did not reveal the gender of the colleague that the leader is interacting with. As such, the paper scenarios rendered the gender of the leader pervasive which paved the way for stereotypical gender attributions (Tosi & Einbender, 1985). While it is acknowledged that research on the SITL have formerly utilized

paper vignettes (e.g., van Knippenberg & van Knippenberg, 2005), the only study that integrated demographic characteristics (gender) with the SITL based the experimental procedure on a simulated group-based decision-making task whereby participants were given a platform to interact with other group members and their leader which likely provided them with sufficient information to assess what the leader represents above and beyond the sole impact of gender (Hogg et al., 2006). Thus, it is recommended that future research uses video vignettes to replicate the results of Study 1 and/or to utilize paper scenarios that reveal the gender of the colleague that the leader is interacting with. An additional means of replication would be through elaborating more versus less on the way the leader interacts with their followers. In addition, future research could also present paper scenarios without providing a picture of the leader which can decrease the salience of gender. By integrating those recommendations, participants might be better able to construct an image of the leader that paves the way for perceptions of leadership group prototypicality.

Furthermore, as a classic experimental design for studies 1 and 2 was conducted, random allocation of participants over the different experimental groups was sought (Shadish et al., 2002). Nevertheless, it could be argued that one of the weaknesses in the studies is the inclusion of control variables (participant nationality) in the analyses – a procedure which can diminish the strength of an experimental design (Shadish et al., 2002). However, as my samples were characterized by high diversity with many being non-native English speakers, it is warranted that I controlled for participant nationality, particularly because the means of administration necessitated that participants have a good command of the English language. Moreover, including a control variable in experimental designs can potentially serve to establish a ‘purer’ effect among study variables (Field, 2009).

In addition, the experimental studies were less disposed to common method and source biases as our independent and dependent variables had different rating sources (2 categorical independent variable – leader gender and follower gender versus participants’ ratings of

leadership effectiveness as a dependent variable). Nonetheless, we cannot conclude causality with regards to our mediator analyses (Study 1) as the mediator (leadership group prototypicality) and outcome measure (perceptions of leadership effectiveness) suffer from common rater effect (Podsakoff et al., 2003). Future research targeting this gap is recommended.

A further consideration to this thesis is that two of the studies relied on student samples and thus the characteristic of the sample might have played a role (Podsakoff et al., 2003). The participants were students who were asked to assume a follower role in an artificial work setting. In order to counteract for a possible shortcoming from this design, I attempted to increase experimental realism as explained in Chapter 4 (Aguinis & Bradley, 2014). Nonetheless, the fact that I relied on a student sample does not prove to be problematic especially when experiments are executed with the aim of establishing internal validity and to be later complemented by a field study (Maner, 2016). Furthermore, researchers have asserted that there is no basis to believe that a student sample will behave differently from the wider population (Brown & Lord, 1999).

Therefore, to compensate for sacrifices of external validity, another strength in this thesis lies in replicating the findings in a field setting – a feature that increases the robustness of the results (Maner, 2016; Shadish et al., 2002). In particular, the model was tested with a sample of 126 employees working in 10 services organizations in Lebanon and Germany. The diversity inherent in the sample increases the generalizability and replicability of our results (Maner, 2016). Nevertheless, our field study is not without its limitations which can be addressed in future research.

The field study has a number of limitations concerning sample size and research design. Although the sample size abides by the general rules of thumb postulated by researchers for conducting regressions analyses ($N > 104 + 7$ (number of predictors); $N = 10 \times 7$ (number of predictors)) (Green, 1991; Harris, 1985), to gain better power and to be able to detect small effect sizes, it is recommended to have 30 participant per variable making the recommended sample size for our field study 210 (Cohen & Cohen, 1975).. While this caveat does not undermine the

significance of the results, it poses concerns on whether the reported non-significant findings actually denote no relationship between variables. In addition, the small sample size could have also affected the lack of significant findings of the relationship between female leaders, leadership styles, and female followers.

Furthermore, the cross-sectional nature of the field study poses some methodological challenges. All of the study variables were collected at the same point in time and in one questionnaire (mono-source design) thus posing potential risks of common method/source bias (Podsakoff et al., 2003). The threat of common source variance is lowered though as the independent variables (leader gender) and one of the moderators (follower gender) are demographic variables; the threat would have been greater had continuous variables been used. While a mono-source design is subject to inflated relationships between study variables, it is worth noting that common source/method variance does not account for statistical interactions obtained in regressions analyses but rather results in an undervaluation of the effect sizes of interactions and decreases the power for the test of interactions (McClelland & Judd, 1993). Subsequently, although it is recommended that future research utilizes a study that does not have a mono-method mono-source design, the fact that the field study suffers from such biases does not form any threat to the validity of the findings regarding the interactions between leader gender and leadership styles, and among leader gender, leadership styles, and follower gender. However, the inherent variance might have affected the conclusions from the moderated mediation model as both the mediator and outcome measure were rated by followers (Podsakoff et al., 2003). This provides further ground to conduct future research where study variables are measured at different points in time and through different raters.

Apart from addressing the limitations in this thesis, the findings offer several avenues for future research. Firstly, several assumptions underlie the presented conceptual model: that members identify with the groups they work in, leadership roles are mainly male-typed, and female leaders instigate instrumental and norm uncertainty in her followers. While the results

reveal that female leaders who engage in directive leadership, particularly with their male followers, are more effective than male leaders because they are perceived more prototypical, future research should consider how effects change in different organizational settings. For example, it would be interesting to look at prototypical leadership behavior in a female-typed organization or in a stereotypically-male organization but where the prototypical leadership style is communal.

Secondly, since this thesis is one of the first to examine how gender impacts on the perceptions of leadership group prototypicality, further research should explore how leadership behavior other than directive and participative leadership affects followers' perceptions of leadership group prototypicality. Specifically, it would be interesting to look at leadership styles that combine both agentic and communal characteristics such as transformational leadership, as such leadership behavior has been advanced by researchers as most conducive to female leaders (Avolio & Bass, 1997; Eagly et al., 2003; Eagly & Karau, 2002). In addition, future research could also address more communal leadership behavior that is heavily directed towards the welfare of the group, such as servant leadership (Greenleaf, 1996), and its impact on leadership group prototypicality and thus leadership effectiveness. As it has been shown in this thesis that female leaders are advised to engage in directive leadership to be prototypical, additional avenues for future research could also consider how to portray female leaders as prototypical per se. In that light, it would be interesting to examine how authentic leadership (Avolio & Gardner, 2005) impacts on leadership group prototypicality.

In addition, as I considered the role of leadership styles and follower gender as boundary conditions to the relationship between leader gender and leadership effectiveness via leadership group prototypicality, future research could consider other moderators such as the leader and follower individual differences. For example, previous research has shown that group extraversion paved the way for females more than males to assume leadership positions (Lemoine, Aggarwal, & Steed, 2015). Hogg and colleagues (2006) have also shown that

followers' traditional gender attitudes influenced the extent to which they endorsed a male versus a female leader. Extending this line of research further, it would be useful to see whether followers' receptivity to different experiences, such as being high on openness to experience or a leader's level of extraversion (John & Srivastava, 1999), would impact on the extent to which they consider a female leader prototypical.

In addition, future research could also explore how a diversity climate or a climate for inclusion whereby both genders can be considered prototypical members of their groups impacts on the relationship between gender and leadership effectiveness. Scholars have posited how a climate for inclusion serves to lessen interpersonal biases and drives leadership effectiveness (Dwertmann & Boehm, 2016; Nishii, 2012).

Another potential boundary condition that can be addressed in future research is the degree to which followers are prone to uncertainty. Previous research has explored the need for cognitive closure, role ambiguity, and self-uncertainty (Cicero et al., 2009; Pierro et al., 2005; Rast et al., 2013), and the support for a prototypical leader. It would be interesting then, to explore how the different manifestations of uncertainty impact on whether a female leader is endorsed.

Furthermore, in the reported studies, I did not explicitly test for the uncertainty inferences followers make when reporting to a female leader. I grounded my analysis in the uncertainty reduction hypothesis (Hogg & Mullin, 1999) and the work of Chattopadhyay et al. (2011). I postulated that followers, particularly the male ones, would be prone to experiencing norm and instrumental uncertainty yet did not measure the degree of felt uncertainty. It is all the more important that future research integrates measures of these variables when looking at demographic differences between leaders and followers that are prone to instigating uncertainty.

Finally, future research is invited to explore the framework under different demographic characteristics. Extending the theoretical framework to other minority groups or leaders considered 'less prototypical' is recommended. This can encompass leaders of different sexual

orientations, ethnicities, disabilities, and nationalities. What would contribute further to our understanding of the effectiveness of female leaders is exploring how the interplay between two minority category memberships (e.g., Rosette, Koval, Ma, & Livingston, 2016) influence perceptions of prototypicality. Future research could also extend the model to deep level dissimilarities such as differences in beliefs, attitudes, and values.

7.6 CONCLUSION

At a time where the proportion of female leaders is on the increase (Catalyst, 2016b), it becomes crucial to understand how and when female leaders are effective in what are typically considered masculine leadership roles. This thesis addressed a gap in the literature accounting for the effectiveness of female leaders (cf. Eagly & Karau, 2002; Tsui & O'Reilly, 1989) and proposed a model based on the SITL, the expectancy violations theory, and the related uncertainty reduction hypothesis, explaining how and under what conditions female leaders drive leadership effectiveness. This thesis provides evidence from two experimental designs as well as a field study, showing that once given sufficient time and information to learn about the leader, followers are likely to consider a female leader using directive leadership more prototypical, and thus effective, than her male counterpart.

Drawing on the studies presented here, practitioners can further their understanding and support for female leaders particularly when they resort to directive leadership behaviour. They are encouraged to train female leaders on using adaptive leadership styles and to be selective in their exercise of directive leadership behaviour.

In conclusion, this thesis advances a theoretical framework which has been replicated in a laboratory and field setting and suggests that the SITL provides a viable alternative explanation as to how and when female leaders drive leadership effectiveness.

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APPENDICES

APPENDIX 1: VIGNETTE SCENARIO, STUDY 1

Study Setting:

As you read the following description, please picture yourself as a member of this workgroup.

Advance Consulting, Inc is a small (150 employees) management consulting firm that specializes in providing solutions to clothing manufacturing facilities. Advance Consulting was founded by two MBA classmates, back in the early '90's and gradually built its client base to include high-profile companies such as Topshop, River Island, Warehouse, Dorothy Perkins, & Miss Selfridge. Advance Consulting has enjoyed a lot of success over the past 2 decades and as a result, the company has become a sought-after employer for graduates seeking to establish themselves in the management consulting industry. The company has 2 offices, in London and Dublin.

Advance Consulting is comprised of 6 board members and 74 teams of 2 members each, a leader and a follower / subordinate. The board of directors has enjoyed a track of simultaneous success over the past 5 years. The board members are all very keen in preserving the prosperity of Advance Consulting. Employees at Advance Consulting are mostly university graduates, with 97% with at least a bachelor's degree and 90% of the leaders with a master's degree. Fifty five percent of Advance Consulting are males and 45% are females.

You have worked at the London office of Advance Consulting for almost a year now as a consultant on various projects. You have just been assigned on a new project: you will work alongside your team leader, [Thomas or Mary], on a turnaround plan for a small clothing manufacturing facility – Kimonos Inc. Kimonos have been making losses for the past 2 years and is plagued by problems. The president of Kimonos hired Advance Consulting to conduct an assessment of the situation. The assessment was conducted by a consulting team member at your company and you will see them discuss their results with your leader. You have previously not

met your leader before who is currently attending a workshop abroad. You will meet them via a video-taped message where you will first see them discuss the report with another team member and then the leader will address you for you are due to start working on the case shortly after.

The video opens with a shot of the leader [Thomas or Mary: business casual dress, similar on other recognizable demographics: age, race/ethnicity, nationality] in a small conference room.

[Thomas or Mary] addressing the follower in the video – (In both videos, the leaders' behaviours were as similar as possible through preserving an ambiguous and inscrutable demeanour):

Script 1 – Directive Leadership

[Thomas or Mary]:

Good morning. I'm Thomas Reynolds. I'm happy to be here; I've heard a lot of good things about you.

Well, let's get to work. I trust that you've read the background information and details about our new engagement. We need to develop a plan to make Kimonos a profitable operation.

Before we get started on the plan I would like to make sure we have a clear objective for this engagement.

Now, you may have your own ideas, but after reviewing the Initial Assessment Report and the Financial Information, it's clear to me that the biggest problem in this plant is that the cost of direct labor is too high. Supervision of direct labor, turnover, and absenteeism are all excessive. Therefore, our objective for this engagement is to lower direct labor costs by at least 7 percentage points, so that it makes up no more than 20% of sales. We also need a plan to reduce employee turnover and absenteeism each by 50%. We need to plan our work around getting to those targets.

[Thomas or Mary]:

I want you to come up with more detail around why absenteeism and turnover are so bad. Call the HR manager at Kimonos plant and get an updated set of numbers. I want absentee rates and turnover numbers for the last 3 quarters.

[Thomas or Mary]:

After you've collected all of your information, I want you to draft a short proposal for me, laying out a list of options for how we're going to get Kimonos to lower direct labor costs by at 7 percentage points and reduce employee turnover and absenteeism each by 50%. Your proposal should outline the options and the costs of implementing each, and should have a timeline with specific milestones. I'll look at the options and decide which items to include in the turnaround plan we put together for the client.

Okay, thanks and we will meet soon.

[Thomas or Mary] – addressing the participants:

I will be looking forward to meeting you in person soon. While working together, I will set the performance objectives and standards and encourage you to abide by them so our work is consistent. I will be providing you with guidelines on how to do your tasks. In putting forward our work schedules and objectives, I would consider the demands of the tasks at hand and forward to you the finalized schedules. For now, and until we meet in person, I want you please to do the task that you will be given. You have 3 minutes to finish this task.

Script 2 – Participative Leadership

[Thomas or Mary]:

Now, I have my own ideas, but I would like to know what you guys think our objective should be. After reviewing the Initial Assessment Report and the Financial Information, what do you consider to be the biggest problems in this plant?

[Adam or Alana]:

It seems to me that direct labor costs are excessive and turnover and absenteeism are too high as well.

[Thomas or Mary]:

Okay, what should we set as an objective?

[Adam or Alana]:

Well, I think we need to figure out a way to lower direct labor costs by at least 7 percentage points, so that it makes up no more than 20% of sales. And we should come up with a plan to reduce employee turnover and absenteeism each by 50%.

[Thomas or Mary]:

Okay, I guess we should plan our work around getting to those targets.

[Thomas or Mary]:

How would you like to approach this? What do you think we should do?

[Adam or Alana]:

I'll come up with more detail around why absenteeism and turnover are so bad. I'll contact the HR manager at Kimonos and get an updated set of numbers for absentee rates and turnover for the last 3 quarters.

After I get all of our information, I'll draft a short proposal, laying out a list of options for how we're going to get Kimonos to lower direct labor costs by at 7 percentage points and reduce employee turnover and absenteeism each by 50%. We should outline the options and the costs of implementing each, and we should have a timeline with specific milestones.

[Thomas or Mary]:

Good. Once we have the proposal, we can all look at the options together and decide which items to include in the turnaround plan we put together for the client.

Okay, thanks and we will meet soon.

[Thomas or Mary] – addressing the participants:

I will be looking forward to meeting you in person soon. While working together, I encourage you to express your ideas and share your suggestions about work and I will be happy to listen to your input. Although I will provide you with guidelines on how to do your tasks, however, I am also open to consider your way of doing things – you might come up with a better way of approaching tasks and in that case we will adopt your suggestions even if I originally disagreed on them. In putting forward our work schedules and objectives, I would consider your input and take on things while doing the planning. For now, and until we meet in person, I want you please to do the task that you will be given. You have 3 minutes to finish this task.

APPENDIX 2: VIGNETTE SCENARIO, STUDY 2

Same setting as Study 1

You will first read a conversation that took place between your leader and one of your colleagues.

The leader will then address you in the last paragraph.

Script 1 – Female Directive



[Mary] to your colleague:

Good morning, I'm Mary Reynolds. I'm happy to be here; I've heard a lot of good things about you.

Well, let's get to work. I trust that you've read the background information and details about our new engagement. We need to develop

a plan to make Kimonos a profitable operation.

Before we get started on the plan I would like to make sure we have a clear objective for this engagement.

Now, you may have your own ideas, but after reviewing the Initial Assessment Report and the Financial Information, it's clear to me that the biggest problem in this plant is that the cost of direct labor is too high. Supervision of direct labor, turnover, and absenteeism are all excessive. Therefore, our objective for this engagement is to lower direct labor costs by at least 7 percentage points, so that it makes up no more than 20% of sales. We also need a plan to reduce employee turnover and absenteeism each by 50%. We need to plan our work around getting to those targets. I want you to come up with more detail around why absenteeism and turnover are so bad. Call the HR manager at Kimonos plant and get an updated set of numbers. I want absentee rates and turnover numbers for the last 3 quarters.

After you've collected all of your information, I want you to draft a short proposal for me, laying out a list of options for how we're going to get Kimonos to lower direct labor costs by at 7 percentage points and reduce employee turnover and absenteeism each by 50%. Your proposal

should outline the options and the costs of implementing each, and should have a timeline with specific milestones. I'll look at the options and decide which items to include in the turnaround plan we put together for the client.

[Mary] - addressing you:



I will be looking forward to meeting you in person soon. While working together, I will set the performance objectives and standards and encourage you to abide by them so our work is consistent. I will be providing you with guidelines on how to do your tasks. In putting forward our work schedules and objectives, I would consider the

demands of the tasks at hand and forward to you the finalized schedules. For now, and until we meet in person, I want you please to proof read the following paragraph and correct any mistakes in spelling that you come across. You have 3 minutes to finish this task.

Script 2: Male Directive

[Thomas] to your colleague:



Good morning, I'm Thomas Reynolds. I'm happy to be here; I've heard a lot of good things about you.

Well, let's get to work. I trust that you've read the background information and details about our new engagement. We need to develop a plan to make Kimonos a profitable operation.

Before we get started on the plan I would like to make sure we have a clear objective for this engagement.

Now, you may have your own ideas, but after reviewing the Initial Assessment Report and the Financial Information, it's clear to me that the biggest problem in this plant is that the cost of direct labor is too high. Supervision of direct labor, turnover, and absenteeism are all excessive.

Therefore, our objective for this engagement is to lower direct labor costs by at least 7 percentage

points, so that it makes up no more than 20% of sales. We also need a plan to reduce employee turnover and absenteeism each by 50%. We need to plan our work around getting to those targets. I want you to come up with more detail around why absenteeism and turnover are so bad. Call the HR manager at Kimonos plant and get an updated set of numbers. I want absentee rates and turnover numbers for the last 3 quarters.

After you've collected all of your information, I want you to draft a short proposal for me, laying out a list of options for how we're going to get Kimonos to lower direct labor costs by at 7 percentage points and reduce employee turnover and absenteeism each by 50%. Your proposal should outline the options and the costs of implementing each, and should have a timeline with specific milestones. I'll look at the options and decide which items to include in the turnaround



plan we put together for the client.

[Thomas] - addressing you:

I will be looking forward to meeting you in person soon. While working together, I will set the performance objectives and standards and encourage you to abide by them so our work is consistent. I will be providing you with guidelines on how to do your tasks. In putting forward our work schedules and objectives, I would consider the demands of the tasks at hand and forward to you the finalized schedules. For now, and until we meet in person, I want you please to do that the task that you will be soon given. You have 3 minutes to finish this task.

Script 3 – Male Participative



[Thomas] to your colleague:

Good morning, I'm Thomas Reynolds. I'm happy to be here; I've heard a lot of good things about you.

Well, let's get to work. I trust that you've read the background information and details about our new engagement. We need to develop a plan to make Kimonos a profitable operation.

Before we get started on the plan I would like to make sure we have a clear objective for this engagement.

[Thomas]:

Now, I have my own ideas, but I would like to know what you guys think our objective should be. After reviewing the Initial Assessment Report and the Financial Information, what do you consider to be the biggest problems in this plant?

[Colleague]:

It seems to me that direct labor costs are excessive and turnover and absenteeism are too high as well.

[Thomas]:

Okay, what should we set as an objective?

[Colleague]:

Well, I think we need to figure out a way to lower direct labor costs by at least 7 percentage points, so that it makes up no more than 20% of sales. And we should come up with a plan to reduce employee turnover and absenteeism each by 50%.

[Thomas]:

Okay, I guess we should plan our work around getting to those targets.

[Thomas]:

How would you like to approach this? What do you think we should do?

[Colleague]:

I'll come up with more detail around why absenteeism and turnover are so bad. I'll contact the HR manager at Kimonos and get an updated set of numbers for absentee rates and turnover for the last 3 quarters.

After I get all of our information, I'll draft a short proposal, laying out a list of options for how we're going to get Kimonos to lower direct labor costs by at 7 percentage points and reduce employee turnover and absenteeism each by 50%. We should outline the options and the costs of implementing each, and we should have a timeline with specific milestones.

[Thomas]:

Good. Once we have the proposal, we can all look at the options together and decide which items to include in the turnaround plan we put together for the client.

Okay, thanks and we will meet soon.



[Thomas] – addressing you:

I will be looking forward to meeting you in person soon. While working together, I encourage you to express your ideas and share your suggestions about work and I will be happy to listen to your input.

Although I will provide you with guidelines on how to do your tasks,

however, I am also open to consider your way of doing things – you might come up with a better way of approaching tasks and in that case we will adopt your suggestions even if I originally disagreed on them. In putting forward our work schedules and objectives, I would consider your input and take on things while doing the planning. For now, and until we meet in person, I want you please to do that the task that you will be soon given. You have 3 minutes to finish this task.

Script 4 – Female Participative

[Mary] to your colleague:



Good morning, I'm Thomas Reynolds. I'm happy to be here; I've heard a lot of good things about you.

Well, let's get to work. I trust that you've read the background information and details about our new engagement. We need to develop a plan to make Kimonos a profitable operation.

Before we get started on the plan I would like to make sure we have a clear objective for this engagement.

[Mary]:

Now, I have my own ideas, but I would like to know what you guys think our objective should be. After reviewing the Initial Assessment Report and the Financial Information, what do you consider to be the biggest problems in this plant?

[Colleague]:

It seems to me that direct labor costs are excessive and turnover and absenteeism are too high as well.

[Mary]:

Okay, what should we set as an objective?

[Colleague]:

Well, I think we need to figure out a way to lower direct labor costs by at least 7 percentage points, so that it makes up no more than 20% of sales. And we should come up with a plan to reduce employee turnover and absenteeism each by 50%.

[Mary]:

Okay, I guess we should plan our work around getting to those targets.

[Mary]:

How would you like to approach this? What do you think we should do?

[Colleague]:

I'll come up with more detail around why absenteeism and turnover are so bad. I'll contact the HR manager at Kimonos and get an updated set of numbers for absentee rates and turnover for the last 3 quarters.

After I get all of our information, I'll draft a short proposal, laying out a list of options for how we're going to get Kimonos to lower direct labor costs by at 7 percentage points and reduce employee turnover and absenteeism each by 50%. We should outline the options and the costs of implementing each, and we should have a timeline with specific milestones.

[Mary]:

Good. Once we have the proposal, we can all look at the options together and decide which items to include in the turnaround plan we put together for the client.

Okay, thanks and we will meet soon.

[Mary] – addressing you:



I will be looking forward to meeting you in person soon. While working together, I encourage you to express your ideas and share your suggestions about work and I will be happy to listen to your input.

Although I will provide you with guidelines on how to do your tasks, however, I am also open to consider your way of doing things – you

might come up with a better way of approaching tasks and in that case we will adopt your suggestions even if I originally disagreed on them. In putting forward our work schedules and objectives, I would consider your input and take on things while doing the planning. For now, and until we meet in person, I want you please to do that the task that you will be soon given.

You have 3 minutes to finish this task.

APPENDIX 3: SURVEYS, STUDY 1 AND STUDY 2

Study 1 Survey

Information Sheet

You are being invited to take part in a research study. Prior to deciding whether or not you would like to take part, it is essential that you understand the purpose and the procedure of the study. This document will provide you with details regarding the study. If you have any additional questions regarding the study please contact the principal investigator Pascale Daher



What is the purpose of the study?

The purpose of the study is to look at the effectiveness of leaders with different followers. Particularly, this study sets out to understand how dissimilar leaders can influence leadership effectiveness.

Why have I been invited?

You have been invited to take part in this study because you are a postgraduate student at Aston University and it is from this sample that participants for this study are drawn. In total, 160 additional participants will be asked to take part as well.

Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

It is important to highlight that by choosing to either take part or not take part in the study will have no impact on your marks, assessments or future studies.

What will happen to me if I take part?

The study will take no longer than 30 minutes to complete. In this timeframe, you will watch a video of a leader and you will be asked to perform a simple task that does not require any prior knowledge. The task will take 3 minutes to be completed after which you will be asked to respond to a questionnaire containing various measures of leader trust, legitimacy, liking, effectiveness, among others.

The study does not seek to evaluate your leadership style, rather, you will be asked to evaluate the leadership style of the leader in the video and the study will look at the consequences for the leadership style on team behavior.

What are the possible disadvantages and risk of taking part?

The principal investigator is not aware of identified disadvantages or risk (risks to your health, well-being, employment, personal relationships, or any other area of your life) involved in taking part in this study. All your responses in this study will be anonymized, i.e., information that you

provide cannot be traced back to you. Only the principal investigator and her supervisor will have access to the information you provide to us.

How will I benefit from participating in this study?

By participating in this research, you will be contributing to the understanding of the effectiveness of demographically diverse leaders and how they can positively influence work outcomes. Apart from having a major contribution on a theoretical level, the outcomes of this study will inform organisational practices in effectively fostering demographically dissimilar leaders.

Moreover, an individualized feedback form on the survey can be emailed back to you for your own development. This will only be provided based on your consent.

Will what I say in this study be kept confidential?

The information that you provide in this study will be kept strictly confidential (subject to legal limitations). Only the principal investigator and her supervisor will have access to the data. Data collection, storage, and processing will be in line with the Data Protection Act (1998) and the UK Research Councils (2009). Information collected in this study will by no means be provided to a third party. Findings from data analysis will only be made public in an unattributable format and thus no individual responses can be traced back.

In accordance with the code of conduct published by the Research Councils UK (2009), data will be kept for a period up to ten years. After this time, all data will be destroyed.

What should I do to take part?

If you decide to take part, just please sign the consent form and the administrator will guide you through the rest.

What will happen to the results of the research study?

Results from this study primarily form a part of a doctoral thesis. The findings may also be used for peer-reviewed academic journals, practitioner journals, and/or presentations. The findings will be available with the principal investigator upon the completion of the thesis. If you are interested in the results of this study, you can email the undersigned and results will be shared upon completion of the research.

Who is organizing the research?

This study forms a part of a doctoral thesis in Aston Business School in the Work and Organizational Psychology Group.

This study has been reviewed and given a favorable opinion by the Work and Organisational Psychology Group at the Aston University and approved by the Research Ethics Committee at Aston University.

m [REDACTED]

7

7

Signature

Task Sheet

Please enter your unique 3-digit code. Your code should consist of:

- Second letter of your mother's name
- Third letter of your father's name
- The number of the month you were born in

Code: _____

Your leader is now asking you to generate as many items as you can think of that a clothing factory can generate. You have 3 minutes to finish this task.

[illegible]

Research Study

Characteristics and Leadership Style Of Your Leader

In order to be able to match your results with those of the task, please indicate below the **same code** you provided when performing the task. To remind you of how you created the code, below are the instructions:

Your unique 3-digit code should consist of:

- a. Second letter of your mother's name
- b. Third letter of your father's name
- c. The number of the month you were born in

1. Please enter your 3-digit code in the box below: *

2. If you wish to receive individualized feedback on the results of the survey, please provide your email address in the textbox below:

While responding to questions related to "**your leader**", please have in mind the leader you saw **in the video** as "**your leader**" and respond to items accordingly.

3. To what extent do you perceive "your leader" as having: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
Respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Influence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Please read the statements below, which refer to the leadership style exhibited by "your leader" and indicate the extent to which you agree or disagree with each statement. *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader considers my ideas when he/she disagrees with them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader establishes my performance goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader encourages me to express ideas/suggestions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader sets the goals for my performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader uses my suggestions to make decisions that affect us	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader provides commands in regard to my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader makes decisions that are based only on his/her ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader gives me a chance to voice my opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to my work, my leader gives me instructions on how to carry it out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader gives me instructions about how to do my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader listens to my ideas and suggestions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader establishes the goals for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Please read the statements below and indicate the extent to which you agree or disagree with each statement.*

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
I like my leader very much as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think my leader would make a good friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would want my leader to continue to be the leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader deserves the position of the leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would not approve him/her as a leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Please read the statements below and indicate the extent to which you agree or disagree with each statement. *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I would be willing to let my leader have complete control over my future in this company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I had my way, I wouldn't let my leader have any influence over issues that are important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I really wish I had a good way to keep an eye on my leader.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be comfortable giving my leader a task or problem which was critical to me, even if I could not monitor their action.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Do you know where you stand with "your leader"....do you usually know how satisfied your leader is with what you do? *

Rarely

☐

Occasionally

☐

Sometimes

☐

Fairly Often

☐

Very Often

☐

8. How well does "your leader" understand your job problems and needs? *

Not a bit

☐

A little

☐

A fair amount

☐

Quite a bit

☐

A great deal

☐

9. How well does "your leader" recognize your potential? *

Not at all

☐

A little

☐

Moderately

☐

Mostly

☐

Fully

☐

10. Regardless of how much formal authority he/she has built into his/her position, what are the chances that "your leader" would use his/her power to help you solve problems in your work? *

None

☐

Small

☐

Moderate

☐

High

☐

Very high

☐

11. Again, regardless of the amount of formal authority "your leader" has, what are the chances that he/she would "bail you out," at his/her expense? *

None

☐

Small

☐

Moderate

☐

High

☐

Very high

☐

12. I have enough confidence in "my leader" that I would defend and justify his/her decision if he/she were not present to do so: *

Strongly disagree

☐

Disagree

☐

Neutral

☐

Agree

☐

Strongly agree

☐

13. How would you characterize your working relationship with "your leader"? *

☐ Extremely ineffective

☐ Worse than average

☐ Average

☐ Better than average

☐ Extremely effective

14. Please read the below statements and indicate the extent to which you think "your leader" would engage in the following activities: *

	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
Is effective in meeting my job-related needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uses methods of leadership that are satisfying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is effective in representing me to higher authority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Works with me in a satisfactory way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heightens my desire to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is effective in meeting organizational requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increases my willingness to try harder	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leads a group that is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Please indicate the extent to which you agree with each of the following statements: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader is a good example of the kind of people that are members of my team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader represents what is characteristic about the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader has a lot in common with the members of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. Based on your observations of "your leader", please indicate the extent to which you agree with each of the following statements: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader considers my viewpoint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader is able to suppress personal biases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader provides me with timely feedback about the decision and its implications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader treats me with kindness and consideration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader shows concern for my rights as an employee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader takes steps to deal with me in a truthful manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Based on **your role in this study**, please indicate the extent to which you agree with each of the following statements: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
The work I do is very important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident about my ability to do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have significant autonomy in determining how I do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My impact on what happens in my department is large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job activities are personally meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am self-assured about my capabilities to perform my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can decide on my own how to go about doing my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a great deal of control over what happens in my department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The work I do is meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have mastered the skills necessary for my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have considerable opportunity for independence and freedom in how I do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have significant influence over what happens in my department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Personal Characteristics and Preferences

18. While you consider yourself in a leadership position, please read the following items and indicate the extent to which the items correspond to your own behavior:

	Strongly disagree	Slightly disagree	Disagree	Neutral	Slightly agree	Agree	Strongly agree
I can tell my followers if something work-related is wrong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make the career development of my followers a priority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My followers would seek help from me if they had a personal problem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I emphasize the importance of giving back to the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put the interest of my followers ahead of my own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I give my followers freedom to handle difficult situations in the way that they feel is best	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would not compromise ethical principles in order to achieve success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Below are statements that describe how you may think about yourself right now. On a scale of 1 to 9, with 1 being *strongly disagree* and 9 being *strongly agree*, please indicate your level of agreement or disagreement with each statement. *

	1 = Strongly disagree	2	3	4	5	6	7	8	9 = Strongly agree
I am uncertain about myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am uncertain about my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am uncertain about my place in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about my place in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about my place in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

20. Please read each of the below statements and indicate the extent to which you agree with each one of them: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
I monitor my actions regularly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I check my activities so that my leader will be satisfied with them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I check how well I perform	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I check whether my activities produce the expected results	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

21. This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer on the scale. Indicate to what extent you generally feel this way (that is, how you feel on average):

*

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. Below you can find a list of adjectives that are used to describe the personality of individuals. Please think about yourself, and rate the extent to which you think that each pair of adjectives describes your own personality. *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Extraverted, enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critical, quarrelsome	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dependable, self-disciplined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxious, easily upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open to new experiences, complex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reserved, quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathetic, warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disorganized, careless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm, emotional stable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conventional, uncreative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

23. Please read the following statements and indicate the extent to which you agree with each one of them:

	Completely disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Completely agree
I don't like situations that are uncertain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dislike questions which could be answered in many different ways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find that a well ordered life with regular hours suits my temperament	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel uncomfortable when I don't understand the reason why an event occurred in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel irritated when one person disagrees with what everyone else in a group believes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like to go into a situation without knowing what I can expect from it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I have made a decision, I feel relieved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am confronted with a problem, I'm dying to reach a solution very quickly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would quickly become impatient and irritated if I would not find a solution to a problem immediately.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like to be with people who are capable of unexpected actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dislike it when a person's statement could mean many different things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find that establishing a consistent routine enables me to enjoy life more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy having a clear and structured mode of life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not usually consult many different opinions before forming my own view	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dislike unpredictable situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Final Information

24. Please indicate how applicable you believe the following statements to be: *

	Totally not applicable	Barely applicable	Neutral	Applicable	Completely applicable
I think that groups benefit from the involvement of people from different backgrounds (people from different ages, genders, organizational tenure, nationality, marital status, & functional backgrounds)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating groups that contain people from different backgrounds(people from different ages, genders, organizational tenure, nationality, marital status, & functional backgrounds) can be a recipe for trouble.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that groups should contain people with similar backgrounds (people from similar ages, genders, organizational tenure, nationality, marital status, & functional background)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A good mix of group members' backgrounds (ages, genders, organizational tenure, nationality, marital status, & functional background) helps doing the task well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Please indicate your answers to the below:

Your age in years

Your nationality

Your marital status

Your current degree (MSc in OB, IB,...)

26. Please select your ethnicity from the list below:

- ☐ White - British
- ☐ Other White background
- ☐ Black - British
- ☐ Other Black background
- ☐ Asian - British
- ☐ Other Asian background
- ☐ Mixed - White & Black
- ☐ Mixed - White & Asian
- ☐ Mixed - Black & Asian
- ☐ Other mixed background
- ☐ Other background
- ☐ Prefer not to say

Thank You!

Thank You!

Thank you very much.

Study 2 Survey

Task

Please enter your unique 3-digit code. Your code should consist of:

- Second letter of your mother's name
- Third letter of your father's name
- The number of the month you were born in

Code: _____

Your leader is now asking you to list as many reasons as you can think of of why employees might be unhappy at work. You have 3 minutes to finish this task.

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

Scenario Study

Characteristics and Leadership Style Of Your Leader

In order to be able to match your results with those of the task, please indicate below the **same code** you provided when performing the task. To remind you of how you created the code, below are the instructions:

Your unique 3-digit code should consist of:

- a. Second letter of your mother's name
- b. Third letter of your father's name
- c. The number of the month you were born in

1. Please enter your 3-digit code in the box below: *

While responding to questions related to "**your leader**", please have in mind the leader you read about in **the scenario** as "**your leader**" and respond to items accordingly.

2. To what extent do you perceive your leader as possessing the following:

	Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree
Respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Influence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Please read the statements below, which refer to the leadership style exhibited by "your leader" and indicate the extent to which you agree or disagree with each statement. *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader considers my ideas when he/she disagrees with them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader establishes my performance goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader encourages me to express ideas/suggestions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader sets the goals for my performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader uses my suggestions to make decisions that affect us	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader provides commands in regard to my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader makes decisions that are based only on his/her ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader gives me a chance to voice my opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to my work, my leader gives me instructions on how to carry it out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader gives me instructions about how to do my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader listens to my ideas and suggestions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader establishes the goals for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Do you know where you stand with "your leader"....do you usually know how satisfied your leader is with what you do? *

Rarely

☐

Occasionally

☐

Sometimes

☐

Fairly Often

☐

Very Often

☐

5. How well does "your leader" understand your job problems and needs? *

Not a bit

☐

A little

☐

A fair amount

☐

Quite a bit

☐

A great deal

☐

6. How well does "your leader" recognize your potential? *

Not at all

☐

A little

☐

Moderately

☐

Mostly

☐

Fully

☐

7. Regardless of how much formal authority he/she has built into his/her position, what are the chances that "your leader" would use his/her power to help you solve problems in your work? *

None

☐

Small

☐

Moderate

☐

High

☐

Very high

☐

8. Again, regardless of the amount of formal authority "your leader" has, what are the chances that he/she would "bail you out," at his/her expense? *

None

☐

Small

☐

Moderate

☐

High

☐

Very high

☐

9. I have enough confidence in "my leader" that I would defend and justify his/her decision if he/she were not present to do so: *

Strongly disagree

☐

Disagree

☐

Neutral

☐

Agree

☐

Strongly agree

☐

10. How would you characterize your working relationship with "your leader"? *

- ☐ Extremely ineffective
- ☐ Worse than average
- ☐ Average
- ☐ Better than average
- ☐ Extremely effective

11. Please read the below statements and indicate the extent to which you think "your leader" would engage in the following activities: *

	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
Is effective in meeting my job-related needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uses methods of leadership that are satisfying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is effective in representing me to higher authority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Works with me in a satisfactory way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heightens my desire to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is effective in meeting organizational requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increases my willingness to try harder	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leads a group that is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please indicate the extent to which you agree with each of the following statements: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader is a good example of the kind of people that are members of my team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader represents what is characteristic about the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader has a lot in common with the members of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Based on **your role in this study**, please indicate the extent to which you agree with each of the following statements: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
The work I do is very important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident about my ability to do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have significant autonomy in determining how I do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My impact on what happens in my department is large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job activities are personally meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am self-assured about my capabilities to perform my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can decide on my own how to go about doing my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a great deal of control over what happens in my department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The work I do is meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have mastered the skills necessary for my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have considerable opportunity for independence and freedom in how I do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have significant influence over what happens in my department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

14. Please describe the extent to which each of the following traits is desirable for your leader to have: *

	Undesirable	Somewhat undesirable	Neither desirable nor undesirable	Somewhat desirable	Desirable
Assertive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tactful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Feeling not easily hurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High need for power	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grateful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adventurous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Understanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vigorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talkative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forceful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Courteous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Personal Characteristics and Preferences

15. Below you can find a list of adjectives that are used to describe the personality of individuals. Please think about yourself, and rate the extent to which you think that each pair of adjectives describes your own personality.

*

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Extraverted, enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critical, quarrelsome	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dependable, self-disciplined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxious, easily upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open to new experiences, complex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reserved, quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathetic, warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disorganized, careless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm, emotional stable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conventional, uncreative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Final Information

16. Please indicate your gender:

- ☐ Female
- ☐ Male

17. Please indicate your answers to the below:

Your age in years

Your nationality

Your degree in (BSc in Management, MSc in Work Psychology...)

Thank You!

Thank You!

Thank you very much.

APPENDIX 4: SURVEY, FIELD STUDY

Team Member Version

Effectiveness of Dissimilar Leaders - Team Member Version

Information & Informed Consent

Dear Participant,

You are being invited to take part in a research study. Prior to deciding whether or not you would like to take part, it is essential that you understand the purpose and the procedure of the study. This page will provide you with details regarding why the study is being done and how it will be carried out, how you can give your informed consent, and information about data protection. If you have any additional questions regarding the study please contact the principal investigator, Pascale Daher [REDACTED]

Purpose & procedure of the study

The purpose of the study is to look at the effectiveness of leaders in demographically diverse teams. Particularly, this study sets out to understand how demographically dissimilar leaders can positively affect employee attitudes (such as commitment and job satisfaction) and performance.

You have been invited to take part in this study because you are a member of a leader-member dyad. Participation involves the completion of this questionnaire, which will require no more than 15-20 minutes of your time. In this timeframe, you will be asked to respond to a series of validated scales that measures several attributes of your leader and your relationship with them. The study does not seek to evaluate your own leadership style, rather, you will be asked to respond to a series of questions that looks at different leadership styles and the study will then analyze the consequences of the leadership styles on dyadic behavior.

Data protection

The information that you provide in this study will be anonymized and will be kept strictly confidential (subject to legal limitations). Only the principal investigator and her supervisor will have access to the data. No other third party, such as your leader, your team, your organization or anyone that might have an influence on the status of your employment will have access to the information you provide. During analysis, all your personal responses will be aggregated, so that none of the responses can be tracked back to you.

Results from this study primarily form a part of a doctoral thesis in the Work and Organizational Psychology Group at Aston Business School. The findings may also be used for peer-reviewed academic journals, practitioner journals, and/or presentations. The findings will be available with the principal investigator upon the completion of the thesis. If you are interested in the results of this study, you can email her and results will be shared upon completion of the research.

If you have any concerns about the way in which this study was conducted, please contact the Secretary of the Aston Business School Research Ethics Committee on [REDACTED]

Informed Consent

Participation in this study is voluntary, and you can drop out at any time without indicating reasons. Please note that this is still possible if you have already completed and submitted this questionnaire.

When giving your informed consent, you confirm that:

- You have read and understood the information sheet for this study and that you have had the opportunity to ask any questions;
- You understand that your participation is voluntary and that you are free to withdraw at any time, without giving reason;
- You agree to take part in this study
- You agree that the gathered data may be stored (after anonymisation) in a specialist data centre and may be used for further research.

1. I have read and understood the above information and desire of my own free will to participate in this study. *

- ☐ Yes
- ☐ No

General Information

We also asked your team leader to participate in this study by rating the performance of team members in a separate questionnaire. This information is important for showing that the examined leadership style can increase the performance of team members. In order to match the ratings of your team leader with the respective team members, we asked your team leader to indicate the first two letters of the forename and the first two letters of the surname of every rated team member (Example: Thomas Anderson = THAN). If you agree with matching your rating with your questionnaire, please indicate the first two letters of your forename and the first two letters of your surname in the below field.

Please note that this information will only be used for preparing the data analysis, and that no one except the principal investigator of this study will have access to this information. Your anonymity will at no point be compromised by using this procedure. Should you disagree with this procedure, please skip this step. In this case your data cannot be matched with your performance rating, and the latter will not be included in the data analysis.

2. Please indicate the first two letters of your forename and the first two letters of your surname in this field:

For example, if your name is Thomas Anderson, your code will be: THAN *

3. Which gender are you? *

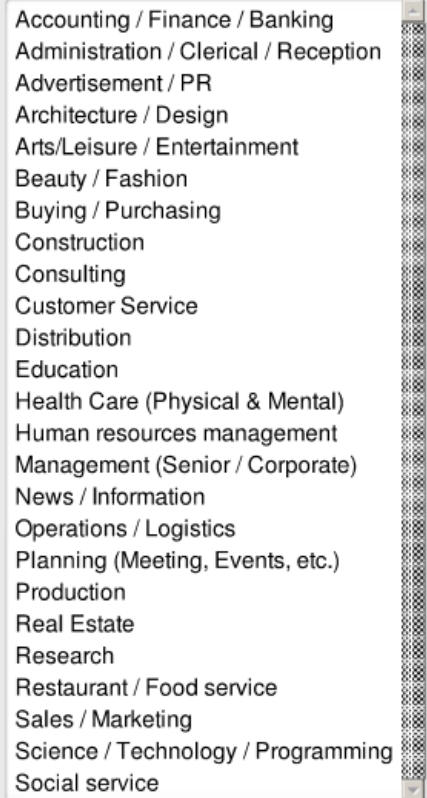
- ☐ Female
- ☐ Male

4. What is your marital status? *



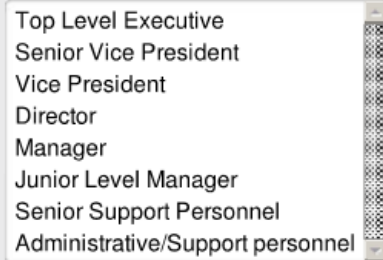
- Single
- Married
- Divorced
- Widowed
- Other

5. Please select your functional background from the list below: *

A scrollable list of functional backgrounds, presented in a white box with a vertical scrollbar on the right side. The list contains 23 items, each representing a different professional field.

Accounting / Finance / Banking
Administration / Clerical / Reception
Advertisement / PR
Architecture / Design
Arts/Leisure / Entertainment
Beauty / Fashion
Buying / Purchasing
Construction
Consulting
Customer Service
Distribution
Education
Health Care (Physical & Mental)
Human resources management
Management (Senior / Corporate)
News / Information
Operations / Logistics
Planning (Meeting, Events, etc.)
Production
Real Estate
Research
Restaurant / Food service
Sales / Marketing
Science / Technology / Programming
Social service

6. Please indicate your position in this organization: *



A dropdown menu with a list of organizational positions. The list includes: Top Level Executive, Senior Vice President, Vice President, Director, Manager, Junior Level Manager, Senior Support Personnel, and Administrative/Support personnel. The menu is currently open, showing the list of options.

- Top Level Executive
- Senior Vice President
- Vice President
- Director
- Manager
- Junior Level Manager
- Senior Support Personnel
- Administrative/Support personnel

7. How old are you? *



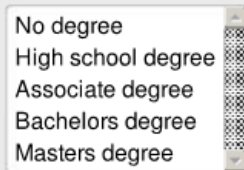
A text input field for entering the respondent's age.

8. Please indicate in years how long you have been working for this organization: *



A text input field for entering the number of years the respondent has been working for the organization.

9. What is the highest degree that you have obtained? *



A dropdown menu with a list of educational degrees. The list includes: No degree, High school degree, Associate degree, Bachelors degree, and Masters degree. The menu is currently open, showing the list of options.

- No degree
- High school degree
- Associate degree
- Bachelors degree
- Masters degree

Your Team Members

Your team members are all individuals with whom you share interdependent tasks and report to the same leader. You may be working in a *team* or a *work group* with members other than your leader.

If you work in a team/work group with members other than you and your leader, please answer the following questions. If not, then click "Not applicable" on Questions 13, 14, & 16.

10. In total, how many members are in your team, including your leader?

For example, if your team consists of only you and your leader, please write 2 in the textbox below. *

11. While considering the team that you belong to, please respond to the following questions: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Not applicable
Group members work closely with each other in doing their work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Group members frequently must coordinate their efforts with each other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The way individual members perform their jobs has a significant impact upon others in the group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. On a scale of 1 to 7, with *1 being not diverse* and *7 being very diverse*, please answer the following questions: *

	1 = Not diverse	2	3	4	5	6	7 = Very diverse	Not applicable
How diverse do you think your group is in general?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How similar are the members of your group with respect to their background (age, gender, education, marital status, functional background, race/ethnicity, nationality)?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Please indicate in years how long you have worked with each member of your team (apart from your leader):

Member 1

Member 2

Member 3

Member 4

Member 5

Member 6

Member 7

Member 8

Member 9

Member 10

14. As you read the following statements, please indicate the extent to which: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree	Not applicable
You feel emotionally attached to your team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You feel a strong sense of belonging to your team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You feel as if the team's problems are your own	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
You feel like part of the family in your team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Characteristics and Leadership Style Of Your Leader

Your leader is defined in this survey as your direct supervisor - the person whom you directly report to. When answering questions about your leader, please answer them while having your direct supervisor in mind.


15. Please indicate the first two letters of the forename of your leader and the first two letters of the surname of your leader.

For example, if your leader's name is Thomas Reynolds, then please write in the textbox THRE. *

16. What is your leader's gender? *

- ☐ Male
- ☐ Female

17. What is your leader's marital status? *



Single
Married
Divorced
Widowed
Don't know
Other

18. What is your leader's functional background? *

Accounting / Finance / Banking
Administration / Clerical / Reception
Advertisement / PR
Architecture / Design
Arts/Leisure / Entertainment
Beauty / Fashion
Buying / Purchasing
Construction
Consulting
Customer Service
Distribution
Education
Health Care (Physical & Mental)
Human resources management
Management (Senior / Corporate)
News / Information
Operations / Logistics
Planning (Meeting, Events, etc.)
Production
Real Estate
Research
Restaurant / Food service
Sales / Marketing
Science / Technology / Programming
Social service


19. Please indicate your leader's position in this organization: *



A dropdown menu with a list of organizational positions. The list includes: Top Level Executive, Senior Vice President, Vice President, Director, Manager, Junior Level Manager, Senior Support Personnel, and Administrative/Support personnel. The menu is currently open, showing the list of options.

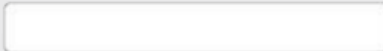
- Top Level Executive
- Senior Vice President
- Vice President
- Director
- Manager
- Junior Level Manager
- Senior Support Personnel
- Administrative/Support personnel

20. How old is your leader? *



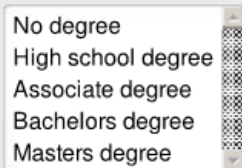
A text input field for entering the age of the leader.

21. Please indicate in years how long your leader has been working for this organization: *



A text input field for entering the number of years the leader has been working for the organization.

22. What is the highest degree that your leader has obtained? *



A dropdown menu with a list of educational degrees. The list includes: No degree, High school degree, Associate degree, Bachelors degree, and Masters degree. The menu is currently open, showing the list of options.

- No degree
- High school degree
- Associate degree
- Bachelors degree
- Masters degree

23. Please indicate in years how long you have been working with your current leader? *

24. Please indicate how similar you perceive yourself to be with respect to your leader on the following attributes: *

*

	Completely dissimilar	Dissimilar	Neither similar nor dissimilar	Similar	Completely similar
Age	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organizational tenure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gender	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nationality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Functional background	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Marital status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Race	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. To what extent do you perceive your leader as having: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
Respect	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Status	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Competence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Influence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. Please read the statements below, which refer to the leadership style exhibited by your leader and indicate the extent to which you agree or disagree with each statement. *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader considers my ideas when he/she disagrees with them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader establishes my performance goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader encourages me to express ideas/suggestions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader sets the goals for my performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader uses my suggestions to make decisions that affect us	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader provides commands in regard to my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader makes decisions that are based only on his/her ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader gives me a chance to voice my opinion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When it comes to my work, my leader gives me instructions on how to carry it out	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader gives me instructions about how to do my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader listens to my ideas and suggestions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader establishes the goals for my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

27. Please read the statements below and indicate the extent to which you agree or disagree with each statement.*

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
I like my leader very much as a person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think my leader would make a good friend	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would want my leader to continue to be the leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader deserves the position of the leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would not approve him/her as a leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. Please read the statements below and indicate the extent to which you agree or disagree with each statement. *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I would be willing to let my leader have complete control over my future in this company	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I had my way, I wouldn't let my leader have any influence over issues that are important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I really wish I had a good way to keep an eye on my leader.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be comfortable giving my leader a task or problem which was critical to me, even if I could not monitor their action.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

29. Do you know where you stand with your leader....do you usually know how satisfied your leader is with what you do? *

Rarely
☐

Occasionally
☐

Sometimes
☐

Fairly Often
☐

Very Often
☐

30. How well does your leader understand your job problems and needs? *

Not a bit
☐

A little
☐

A fair amount
☐

Quite a bit
☐

A great deal
☐

31. How well does your leader recognize your potential? *

Not at all
☐

A little
☐

Moderately
☐

Mostly
☐

Fully
☐

32. Regardless of how much formal authority he/she has built into his/her position, what are the chances that your leader would use his/her power to help you solve problems in your work? *

None
☐

Small
☐

Moderate
☐

High
☐

Very high
☐

33. Again, regardless of the amount of formal authority your leader has, what are the chances that he/she would "bail you out," at his/her expense? *

None
☐

Small
☐

Moderate
☐

High
☐

Very high
☐

34. I have enough confidence in my leader that I would defend and justify his/her decision if he/she were not present to do so: *

Strongly disagree

☐

Disagree

☐

Neutral

☐

Agree

☐

Strongly agree

☐

35. How would you characterize your working relationship with your leader? *

- ☐ Extremely ineffective
- ☐ Worse than average
- ☐ Average
- ☐ Better than average
- ☐ Extremely effective

36. Please read the below statements and indicate the degree to which you think your leader engages in each of the following activities: *

	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
Is effective in meeting my job-related needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uses methods of leadership that are satisfying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is effective in representing me to higher authority	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Works with me in a satisfactory way	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Heightens my desire to succeed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is effective in meeting organizational requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Increases my willingness to try harder	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leads a group that is effective	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

37. Please indicate the extent to which you agree with each of the following statements: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader is a good example of the kind of people that are members of my team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader represents what is characteristic about the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader has a lot in common with the members of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

38. Please indicate the extent to which you agree with each of the following statements: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
My leader considers my viewpoint	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader is able to suppress personal biases	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader provides me with timely feedback about the decision and its implications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader treats me with kindness and consideration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader shows concern for my rights as an employee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My leader takes steps to deal with me in a truthful manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Personal and Job Characteristics and Preferences

39. Below are statements that describe how you may think about yourself right now. On a scale of 1 to 9, with *1 being strongly disagree* and *9 being strongly agree*, please indicate your level of agreement or disagreement with each statement. *

	1 = Strongly disagree	2	3	4	5	6	7	8	9 = Strongly agree
I am uncertain about myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am uncertain about my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am uncertain about my place in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about my place in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about my place in the world	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

40. This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate answer on the scale. Indicate to what extent you generally feel this way (that is, how you feel on average):

*

	Very slightly or not at all	A little	Moderately	Quite a bit	Extremely
Interested	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distressed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Strong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Guilty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scared	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hostile	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Proud	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alert	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ashamed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Inspired	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nervous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attentive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jittery	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Active	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Afraid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

41. Please indicate the extent to which you agree with each of the following questions: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
The work I do is very important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident about my ability to do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have significant autonomy in determining how I do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My impact on what happens in my department is large	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My job activities are personally meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am self-assured about my capabilities to perform my work activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can decide on my own how to go about doing my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a great deal of control over what happens in my department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The work I do is meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have mastered the skills necessary for my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have considerable opportunity for independence and freedom in how I do my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have significant influence over what happens in my department	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

42. Below you can find a list of adjectives that are used to describe the personality of individuals. Please think about yourself, and rate the extent to which you think that each pair of adjectives describes your own personality.

*

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Extraverted, enthusiastic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Critical, quarrelsome	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dependable, self-disciplined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Anxious, easily upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Open to new experiences, complex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reserved, quiet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sympathetic, warm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Disorganized, careless	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Calm, emotional stable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conventional, uncreative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

43. Please read the following statements and indicate the extent to which you agree with each one of them:

	Completely disagree	Disagree	Somewhat disagree	Somewhat agree	Agree	Completely agree
I don't like situations that are uncertain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dislike questions which could be answered in many different ways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find that a well ordered life with regular hours suits my temperament	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel uncomfortable when I don't understand the reason why an event occurred in my life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel irritated when one person disagrees with what everyone else in a group believes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like to go into a situation without knowing what I can expect from it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I have made a decision, I feel relieved	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I am confronted with a problem, I'm dying to reach a solution very quickly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would quickly become impatient and irritated if I would not find a solution to a problem immediately.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I don't like to be with people who are capable of unexpected actions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dislike it when a person's statement could mean many different things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I find that establishing a consistent routine enables me to enjoy life more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy having a clear and structured mode of life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not usually consult many different opinions before forming my own view	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I dislike unpredictable situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Final Information

44. Please indicate how applicable you believe the following statements to be: *

	Totally not applicable	Barely applicable	Neutral	Applicable	Completely applicable
I think that groups benefit from the involvement of people from different backgrounds (people from different ages, genders, organizational tenure, nationality, marital status, & functional backgrounds)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Creating groups that contain people from different backgrounds(people from different ages, genders, organizational tenure, nationality, marital status, & functional backgrounds) can be a recipe for trouble.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that groups should contain people with similar backgrounds (people from similar ages, genders, organizational tenure, nationality, marital status, & functional background)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A good mix of group members' backgrounds (ages, genders, organizational tenure, nationality, marital status, & functional background) helps doing the task well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

45. Diversity in this context refers to differences in age, education, gender, race/ethnicity, marital status, nationality, and functional background.

Please indicate how much you agree with each of the following statements:

*

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
I am aware of my company's efforts to create diversity in the workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The head of my company or organization is committed to diversity at my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe that my company is adequately striving for diversity in the workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust senior management of my company or organization to deal with issues concerning equal treatment at my workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I experienced discrimination at my workplace, I am confident that my employer would be able to resolve it in a fair and just manner, once I raised the issue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank You!

Thank You!

Thank you for taking our survey. Your response is very important to us.

Leader Version – Survey included space for rating 10 employees. Rating space for 2 employees is provided in the appendix.

Effectiveness of Dissimilar Leaders - Leader Version

Information & Informed Consent

Page description:

Dear Leader,

You are being invited to take part in a research study. Prior to deciding whether or not you would like to take part, it is essential that you understand the purpose and the procedure of the study. This page will provide you with details regarding why the study is being done and how it will be carried out, how you can give your informed consent, and information about data protection. If you have any additional questions regarding the study please contact the principal investigator, Pascale Daher [REDACTED]

Purpose & procedure of the study

The purpose of the study is to look at the effectiveness of leaders in demographically diverse teams. Particularly, this study sets out to understand how demographically dissimilar leaders can positively affect employee attitudes (such as commitment and job satisfaction) and performance.

You have been invited to take part in this study because you are a leader of a leader-member dyad. Participation involves the completion of this questionnaire, which will require no more than 10-15 minutes of your time. In this timeframe, you will be asked to respond to a series of validated scales that measures follower performance.

Data protection

The information that you provide in this study will be anonymized and will be kept strictly confidential (subject to legal limitations). Only the principal investigator and her supervisor will have access to the data. No other third party, such as your team, your organization or anyone that might have an influence on the status of your employment will have access to the information you provide. During analysis, all your personal responses will be aggregated, so that none of the responses can be tracked back to you.

Results from this study primarily form a part of a doctoral thesis in the Work and Organizational Psychology Group at Aston Business School. The findings may also be used for peer-reviewed academic journals, practitioner journals, and/or presentations. The findings will be available with the principal investigator upon the completion of the thesis. If you are interested in the results of this study, you can email her and results will be shared upon completion of the research.

If you have any concerns about the way in which this study was conducted, please contact the Secretary of the Aston Business School Research Ethics Committee on [REDACTED]

Informed Consent

Participation in this study is voluntary, and you can drop out at any time without indicating reasons. Please note that this is still possible if you have already completed and submitted this questionnaire.

When giving your informed consent, you confirm that:

- You have read and understood the information sheet for this study and that you have had the opportunity to ask any questions;
- You understand that your participation is voluntary and that you are free to withdraw at any time, without giving reason;
- You agree to take part in this study
- You agree that the gathered data may be stored (after anonymisation) in a specialist data centre and may be used for further research.

1. I have read and understood the above information and desire of my own free will to participate in this study.*

- ☐ Yes
- ☐ No

General Information

Page description:

We also asked your followers to participate in this study by responding to several validated scales. You will be asked to rate the performance of each of your followers on 3 different scales.

In order to match your ratings with those of your followers, we will ask you in the course of this survey to indicate the first two letters of the forename and the first two letters of the surname of every rated follower (Example: Thomas Anderson = THAN).

Please note that this information will only be used for preparing the data analysis, and that no one except the principal investigator of this study will have access to this information. Your anonymity will at no point be compromised by using this procedure. Should you disagree with this procedure, please skip this step. In this case your data cannot be matched with your followers, and will thus not be included in the data analysis.

2. In order to make sure we can rightfully match your performance ratings to that of your followers, please indicate the first two letters of your forename and the first two letters of your surname in this field:

For example, if your name is Thomas Anderson, your code will be: THAN *

3. Which gender are you?*

- ☐ Female
- ☐ Male

4. What is your marital status? *

Single
Married
Divorced
Widowed
Other

5. Please select your functional background from the list below: *

Accounting / Finance / Banking
Administration / Clerical / Reception
Advertisement / PR
Architecture / Design
Arts/Leisure / Entertainment
Beauty / Fashion
Buying / Purchasing
Construction
Consulting
Customer Service
Distribution
Education
Health Care (Physical & Mental)
Human resources management
Management (Senior / Corporate)
News / Information
Operations / Logistics
Planning (Meeting, Events, etc.)
Production
Real Estate
Research
Restaurant / Food service
Sales / Marketing
Science / Technology / Programming
Social service

6. Please indicate your position in this organization: *

Top Level Executive
Senior Vice President
Vice President
Director
Manager
Junior Level Manager
Senior Support Personnel
Administrative/Support personnel

7. How old are you? *

8. Please indicate in years how long you have been working for this organization? *

9. What is the highest degree that you have obtained? *

No degree
High school degree
Associate degree
Bachelors degree
Masters degree

Follower 1

Page description:

In the following page, you will be asked to rate the performance of one of your followers, denoted by Follower 1.

10. Please indicate in the textbox below the first 2 letters of the first name and first 2 letters of the family name of one of your followers.

For example, if his/her name is Thomas Anderson, then please write THAN in the textbox. *

11. Please indicate in years the duration you have worked with Follower 1: *

12. Please read each of the below statements and indicate the extent to which you agree Follower 1 engages in the following: *

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Adequately completes assigned duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fulfills responsibilities specified in job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performs tasks that are expected of him/her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meets formal performance requirements of the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engages in activities that will directly affect his/her performance evaluation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neglects aspects of the job he/she is obligated to perform	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fails to perform essential duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps others who have been absent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps others who have heavy work load	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assists me with my work (when not asked)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takes time to listen to co-workers' problems and worries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goes out of way to help new employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takes a personal interest in other employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passes along information to co-workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attendance at work is above the norm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gives advance notice when unable to come to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takes undeserved work breaks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Great deal of time spent with personal phone conversations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complains about insignificant things at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conserves and protects organizational property	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adheres to informal rules devised to maintain order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

13. Please read the following statements and indicate how the extent to which Follower 1 engaged in the following: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
Made fun of someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Said something hurtful to someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made an ethnic, religious, or racial remark at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cursed at someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played a mean prank on someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acted rudely toward someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Publicly embarrassed someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taken property from work without permission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spent too much time fantasizing or daydreaming instead of working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Falsified a receipt to get reimbursed for more money than you spent on business expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taken an additional or longer break than is acceptable at your workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Come in late to work without permission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Littered your work environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neglected to follow your instructions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intentionally worked slower than he/she could have worked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed confidential company information with an unauthorised person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used an illegal drug or consumed alcohol on the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Put little effort into your work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dragged out work on order to get overtime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Follower 2

Page description:

In the following page, you will be asked to rate the performance of one of your followers, denoted by Follower 2.

If you do not have any more followers, you can end the survey by closing your browser.

14. Please indicate in the textbox below the first 2 letters of the first name and first 2 letters of the family name of one of your followers.

For example, if his/her name is Thomas Anderson, then please write THAN in the textbox.

15. Please indicate in years the duration you have worked with Follower 2:

16. Please read each of the below statements and indicate the extent to which you agree Follower 2 engages in the following:

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Adequately completes assigned duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fulfills responsibilities specified in job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performs tasks that are expected of him/her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Meets formal performance requirements of the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Engages in activities that will directly affect his/her performance evaluation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neglects aspects of the job he/she is obligated to perform	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fails to perform essential duties	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps others who have been absent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Helps others who have heavy work load	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assists me with my work (when not asked)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takes time to listen to co-workers' problems and worries	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goes out of way to help new employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takes a personal interest in other employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Passes along information to co-workers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attendance at work is above the norm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gives advance notice when unable to come to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Takes undeserved work breaks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Great deal of time spent with personal phone conversations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complains about insignificant things at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conserves and protects organizational property	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adheres to informal rules devised to maintain order	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Please read the following statements and indicate how the extent to which Follower 2 engaged in the following: *

	Strongly disagree	Moderately disagree	Slightly disagree	Neutral	Slightly agree	Moderately agree	Strongly agree
Made fun of someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Said something hurtful to someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Made an ethnic, religious, or racial remark at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cursed at someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Played a mean prank on someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acted rudely toward someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Publicly embarrassed someone at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taken property from work without permission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Spent too much time fantasizing or daydreaming instead of working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Falsified a receipt to get reimbursed for more money than you spent on business expenses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Taken an additional or longer break than is acceptable at your workplace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Come in late to work without permission	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Littered your work environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neglected to follow your instructions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intentionally worked slower than he/she could have worked	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussed confidential company information with an unauthorised person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used an illegal drug or consumed alcohol on the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Put little effort into your work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dragged out work on order to get overtime	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>